"Indian Thought" Series No. 1.

THE TARKABHĀSĀ

OR

EXPOSITION OF REASONING

Translated into English

BY

MAHĀMAHOPĀDHYĀYA

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SECOND EDITION, REVISED

POONA:

ORIENTAL BOOK-SUPPLYING AGENCY.

1924

पितुः श्रीतीर्थनाथस्य
प्रभोर्लक्ष्मीश्वरस्य च
मातुस्तीर्थलतादेव्याः
पादयोरिदमार्पितम् ॥

PRELIMINARY NOTE.

The *Tarkabhāṣā* of Keśava Miśra is an elementary treatise on the *Nyāya System*. It explains, in brief, the main tenets peculiar to that system, along with certain other details that that system subsequently borrowed from the sister system of the *Vāiśeṣikas*. The work has been chosen for translation, because of its freedom from the intricate polemics that make many Nyāya works repellent to the ordinary student. This translation will serve as an introduction to the study of the more abstruse works that are being translated:—*viz.*, the *Bhāṣya* of Vātsyāyana and the *Vārttika* of Udyotakāra,—which constitute the chief and original authority for the Nyāya.

The writer of this work is believed to have lived between 1344 and 1419 A. C. in Mithilā (North Bihar).

The Text used is the reprint from the *Paṇḍit*, publihsed by the Medical Hall Press, Benares.*

PREFACE TO THE SECOND EDITION

The first edition having been exhausted by reason of the book having found useful for students, persons responsible for the welfare of the Student-community have prevailed upon me to have a second edition published. A second edition demanded revision and edition of 'notes'. My pre-occupations have not permitted of anything being done in the way of notes; the revision also has not been as thorough as the occasion demanded. It is with sincere apologies, therefore, that I allow this second edition to go out to the reader; and my only justification lies in the belief and hope that it will prove at least as useful as its predecessor.

THE UNIVERSITY,
Allahabad,
April 17, 1924.

GANGĀNĀTHA JHA.

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* The same has been nicely and methodically, as per translation, printed by the Oriental Book Supplying Agency in a separate book.

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TARKABHĀṢĀ OR 'EXPOSITION OF REASONING'

INTRODUCTION.

I am writing this 'Exposition of Reasoning' consisting, as it does, of short and easy explanations of arguments, for the sake of the dull youth who wishes to have to learn as little as possible for the purpose of entering the portals of the 'Nyāya Philosophy.'

The Highest Good is attained by the true comprehension of—(1) *the Means or Instruments of Right Cognition,* (2) *the Objects of Right Cognition,* (3) *Doubt,* (4) *Motive,* (5) *Corroborative Instance,* (6) *Demonstrated Truth,* (7) *Factors of Reasoning,* (8) *Hypothetical Reasoning,* (9) *Definitive Cognition,* (10) *Discussion,* (11) *Disputation,* (12) *Wrangling,* (13) *Fallacious Reason,* (14) *Casuistry,* (15) *Futile Rejoinder,* (16) *Grounds of Confutation or 'Clinchers'* ;—such is the first aphorism of the Nyāya (as propounded by Gautama). The meaning of this is that liberation is attained by the right discernment of the Means of Right Cognition and the other categories enumerated. This right discernment of the categories is not possible unless there is a regular 'statement,' 'definition' and 'examination' of each of these; as says the *Bhāṣya* (Vātsyāyana):—'In three ways does this science proceed,—through *statement, definition* and *examination.*' Of these 'statement' consists in the mere mention of the category by name; this has been done in the aphorism quoted above; the 'Definition' is the pointing out of their distinctive qualities:—*e.g.*, the definition of the *cow* consists in the pointing out of the *presence of the dewlap,* and such other characteristics which differentiate the *cow* from all other things; and 'Examination' consists in the investigation as to whether or not the definition proposed is applicable to the thing defined. Thus then [the 'statement' having been made in the first aphorism], it now becomes necessary to proceed, in the present work, with the 'definition' and 'examination' [of the categories].

§ 1 Pramāṇas.

'The Instruments of Right Cognition.'

We proceed to explain the 'definition' of *Pramāṇa* which is the first of the categories mentioned in the aphorism. It has been defined as the '*Karaṇa*,' 'instrument' or 'means,' of '*pramā*' 'right cognition'; the definition being stated in the form '*Pramāṇa* is the instrument of right cognition,' where the word '*Pramāṇa*' states the object to be defined, and the phrase 'the instrument of right cognition' constitutes the *definition*.

"If *Pramāṇa* is the 'instrument of right cognition,' it becomes necessary to point out its result; as it is absolutely necessary for an 'instrument' to have a result [an 'instrument' is so called only because it brings about a definite result.]"

True; Right Cognition itself is the *result, i.e.*, that which is accomplished by the said *instrument*; just as of the axe, which is the *instrument* of cutting, the *cut* itself is the *result*.

"What is this 'Right Cognition,' the instrument whereof you regard as '*Pramāṇa*'?"

'Right Cognition' is that apprehension (*anubhava*) which is in due accord with the real character of the thing apprehended; when we apprehend the thing *as it really is*, this apprehension is called 'Right Cognition'. The qualification 'which is in due accord, &c.' serves to exclude Doubt, Misconception and Guess,—in all of which the thing is not apprehended in its real form. The word 'apprehension' (*anubhava*) excludes Remembrance; as this latter is only the cognition of something already cognised; and it is not Apprehension; 'Apprehension' (*anubhava*) being the name given to all cognitions other than Remembrance.

"What do you mean by the word '*karaṇa*,' in your definition of *Pramāṇa*?"

Karaṇa is the name given to that particular *Sādhaka* or instrument which is the most effective (in bringing about a certain result); that is to say, it is the *most efficient cause*.

"But you here explain 'instrument' (*Sādhaka*) by means of its synonym, the word 'cause' (*Kāraṇa*); and we have still to learn what this 'cause' is."

We proceed to explain this: That which must exist before the effect, and which is not taken up in the bringing about of something else, is to be regarded as the 'cause' of that effect; *e.g.*, the *thread*, the *loom* and such other things are the 'cause' of cloth; even though in some cases of the making of Cloth, an ass may by chance come to the place, immediately before the making,—yet this mere *antecedence* does not make the ass a 'Cause' of the Cloth; because the previous presence of the ass is not *necessary* in the making of the Cloth. Then again, even though the presence of the *colour* of the thread is necessary, previous to the making of the Cloth, yet that colour cannot be regarded as the 'Cause' of the Cloth, because the colour of the thread is taken up in the bringing about of an entirely different effect, in the shape of the *colour* of the cloth woven out of those threads. It may be possible to regard the colour of the thread as the Cause of the *cloth* as also of its *colour*; but this would involve an unnecessary multiplication of assumptions. Thus then, the 'Cause' of an effect may be defined as *that necessary antecedent which is not taken up in the bringing about of something else.* Similarly the "effect" of a Cause may be defined as *that necessary consequent which is not brought about by any other Cause.*

Some writers have defined the 'Cause' as "that whose presence and absence (or affirmation and denial) are imitated by the presence and absence of the effect [the 'Effect' being *present* only when the 'Cause' is *present*, and the 'Effect being *absent* when the 'Cause' is *absent*.]" This however is not right; because this definition of 'Cause' would fail to apply to such eternal and all pervading substances as the Ākāśa and the like; because (being eternal) there is no point of time at which their *absence* would be possible; and (being all-pervading) there is no point in space where they would be absent; [and thus, if '*absence*' formed an integral factor of the definition, it could not apply to such substances as the above, in whose case *absence* of any kind is not possible.]

The Cause is of three kinds; (1) the *Samavāyi*, the *Material*, or *Constituent* Cause; (2) the *Asamavāyi*, the *Non-Constituent* Cause; and (3) the *Nimitta*, the *Efficient* cause, or Cause *in general.* Of these, the Constituent Cause is that which forms the material out of which, and inherent in which, the effect is produced ; *e.g.*, threads are the Constituent Cause of the Cloth ; because it is out of the *threads*, and never apart from these, that the Cloth is produced ; it is not produced out of any such other things as the shuttle and the like.

" It cannot be denied that the Cloth is as much related to the shuttle and the other things as to the threads ; under the circumstances, (how can we accept your assertion that it is out of, and as) inseparably related to, the *threads* only,—and not those other things,—that the Cloth is produced ?"

It is true that the Cloth is *related* to those other things also ; but *relation* is of two kinds : (1) *Saṁyoga*, Conjunction and (2) *Samavāya*, Inherence. Of these, the relation subsisting between two inseparable or intimate things is called ' Inherence ; ' while that which subsists between things that are separable or not intimate, is 'Conjunction.'

" What do you mean by ' *intimate* ' things ?"

Two things are said to be ' intimate ' when between them, so long as one is not destroyed it subsists in the other ; as has been declared in the following verse :—

' Those two things are to be regarded as *intimate*, of whom so long as one is not destroyed, it continues to subsist in the other.'

As for example, the Whole and its Parts, the Quality and the Substance, the Action and the Actor, the Individual and Class, the Specific Qualities and the Eternal Substance. The Whole, the Quality, the Action, the Individual and the Specific Quality,—so long as they do exist, and are not completely destroyed,—continue to subsist, respectively, in the Part, the Substance, the Action, the Class and the Eternal Substance ; when they are destroyed, then they have no substrate at all ; for instance, when the Cloth is destroyed on the destruction of the constituent threads [it does not subsist anywhere] ; or when the Quality is destroyed on the destruction of its substrate, [it does not subsist anywhere] ; and the *destructibility* of things consists in the presence of all those circumstances that are conducive to its destruction. Thus then, it is the relation between such *intimate* things as the Cloth and the Thread, or the Whole and the Part,—that constitutes ' Inherence.'

The relation between the Cloth and the Shuttle, on the other hand, is not 'Inherence'; because these are not *intimate* or *inseparable*; the Shuttle does not subsist in the Cloth alone; nor does the Cloth subsist in the Shuttle alone; hence the relation between these two must be regarded as 'Conjunction.' Thus then, as it is in the Thread that the Cloth inheres,—and the Constituent Cause is that out of which, and *inhering* in which, the effect is produced,—it is the *Thread*, and not the *Shuttle*, that is the Constituent Cause of the Cloth; the Cloth again is the Constituent Cause of the Colour and such other qualities inhering in it. Similarly the lump of clay is the Constituent Cause of the Jar; and the Jar is the Constituent Cause of the Colour and other qualities inhering in itself.

"As a matter of fact, the colour of the jar is brought into existence at the same time that the jar itself is produced; thus the two, the jar and its colour, coming into existence as simultaneously as the right and left horns of the cow, there can be no sequence between the two; and as such one cannot be regarded as the *cause* of the other [*antecedence* being a necessary condition in all causes]; and as the Constituent Cause is only a particular form of Cause, the jar cannot be the Constituent Cause of its own Colour."

It is not true that the Substance and its Quality are brought into existence at the same time; as a matter of fact, in the first instance, when the substance is brought into existence, it is entirely devoid of all qualities; and it is only later that the qualities inhering in it are produced. If the two were brought into existence at one and the same time, then the casual conditions for both would be precisely the same; and in that case there would be no difference between the two (and the substance and its quality would have to be regarded as identical)! Because two things can be held to be distinct only when they are brought into existence by distinct casual conditions. Thus then, in as much as the jar, at the first moment, is produced totally devoid of all qualities,—these latter being produced subsequently,—the jar is without doubt an 'antecedent;' and thus there is no incongruity in regarding the jar as the Constituent Cause of its qualities. In this manner the casual conditions of the two—the jar and its qualities—also become distinct (which precludes the absurdity of the two being regarded as identical); because the jar cannot be its own cause,—no *antecedence* and *sequence* being possible in regard to one and the same thing; the thing cannot form its own *antecedent* and *consequent*. As regards its qualities however, the jar is (the Constituent Cause, being as shown above), antecedent to them in point of time.

"If the jar, at the first moment, is brought into existence, "entirely devoid of all qualities, then, it would be *invisible* at the "time, being devoid of colour; it is only a substance that is large "and is possessed of colour that can be *visible*. In fact being de-"void of qualities, the jar would not be a 'substance' at all; as "Substance has been defined as that *in which qualities 'subsist.'*"

True; but what harm does it do us if the jar is *not* visible *at the first moment of its existence*? Even for one who holds that the jar is produced along with its qualities, the jar is not *visible* at the time that he winks his eyes. Hence we conclude that *at the first moment* the jar is brought into existence, totally devoid of qualities; and it is only at the *second succeeding moment* that it becomes *visible*. Being devoid of qualities at the moment, the jar does not cease to be a 'substance'; because 'substance' can also be defined as *that which forms the 'Constituent'* Cause of things, which condition is fulfilled by the jar (even though devoid of qualities); and in reality the character of *being the substrate of qualities* also may be said to belong to the jar, even though at one particular moment it be devoid of qualities; because it has, even at that time, the *capability of being the substrate of qualities*,—such *capability* consisting in the fact that it is not *absolutely* and *always* devoid of qualities. [And when the 'substance' is defined as the 'substrate of qualities,' all that is meant is that it is *what is capable* of being the substrate of qualities.]

That which is in close proximiy to —*i.e.*, inherent in—the Constituent Cause, and which has its causal efficiency towards a certain effect duly ascertained,—is called the 'Non-Constituent Cause' of that effect; *e. g.*, the *Conjunction or Combination of the yarns* is the 'Non-Constituent Cause' of the Cloth. The *Conjunction* being a quality of the yarns, inheres in those latter, which are the 'Constituent Cause' of the Cloth; and thus the Conjunction is regarded as 'inhering in the Constituent Cause of the Cloth'; then again, that it has 'causal efficiency' towards the production of the Cloth is shown by the fact that it is a 'necessary antecedent' of the Cloth and 'is not taken up in the bringing about of any other effect.'

Similarly the *colour* of the yarns is the 'Non-Constituent Cause' of the Colour of the Cloth.

"It has been said above that of the *Colour of the Cloth,* the 'Constituent Cause' is the *Cloth*; under the circumstances, it must be some quality of the *cloth* that should be the 'Non-Constituent Cause' of the *colour of the cloth*; as it is only a quality of the *cloth* that can 'inhere' in the Constituent Cause of the colour of the cloth; this condition is not fulfilled by the *colour of the yarns,* as this does not inhere in the *Cloth,* which is the 'Constituent Cause' of the colour of the cloth."

This is not right. Because the *colour of the yarn,* though not inhering in the Cloth *directly,* does so *indirectly*; because it inheres in the *yarn* which is the 'Constituent Cause' of the *cloth*; and that which inheres in the 'Constituent Cause' of the 'Constituent Cause' of a thing may be regarded (indirectly) as 'inhering in the Constituent Cause' of that thing.

The 'Efficient Cause,' or 'Cause in general,' is that which, while being neither the 'Constituent' nor the 'Non-Constituent' Cause, is yet a 'Cause'; *e.g.*, the *loom* and such other things are the 'Efficient Cause' of the Cloth.

It is only things positive that have all the above three kinds of cause; of negation, on the other hand, there is only one kind of cause—the 'efficient'—that is possible; and the reason for this lies in the fact that negation or negative entity, cannot 'inhere' in anything; and yet 'inherence' forms a necessary element in the other two kinds of Cause."*

From among these three kinds of Causes, that which happens to be endowed with some sort of an especial aptitude or efficiency is called the 'instrument' ('*Karaṇa*'). And thus we get at the definition that *Pramāṇa* is the '*instrument* of right cognition.'

Some people have defined 'Pramāṇa,' 'Instrument of Right Cognition,' as that which makes known something not already known. This however is not right; because if such were the definition of the 'Instrument of Right Cognition,' then there would be no validity in the serial or (continuous) cognitions that we have of one and the same object,—*e. g.*, the jar;—as for instance. (the cognitions) 'this is a jar,' 'this is a jar' and so forth ;* [because except the first cognition of this series, every one of the rest would have its object such as has already been known by the preceding cognitions.]

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* The reading '*bhāvadrhya*' appears to be a misprint for '*kāraṇadvaya*.'

Nor will it be right to argue that, in as much as each of these momentary cognitions would have for its object the jar *of that particular moment*, each could be regarded as apprehending what is not already known. Because in the sensuous perception that we have of any object, we are not cognisant of any such subtle differentiation of time (as would be necessary in the above case) ; specially as, if such subtle differentiation of time were perceptible, there could be no such idea of simultaneity with regard to the perception as we have (in many cases) of four such things as *action* (of moving), the *disjunction* or *separation* of particles (caused by that action), the *destruction of the previous conjunction* and the *appearance of the next conjunction*.†

"As a matter of fact, a right cognition has many causes, in the shape of the *cognising person*, the *cognised object*, and so forth ; may not these also be regarded as the 'instrument' (*karaṇa*) of cognition (in the same manner as the *Pramāṇa*) ?"

It is only the *sense-contact* (and such other factors) that can be regarded as the '*instrument* of cognition' ; because we find that no sooner these factors present themselves than the resulting cognition appears ; while, as regards the *cognising person* and the

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* These 'serial cognitions' are postulated in view of those cases where the cognition of the jar is present in the mind for a certain length of time ; because no single cognition can subsist beyond a single moment.

† When we pierce the lotus-flower with a needle, the idea that we have is that all the several petals have been pierced *simultaneously* ; though as a matter of fact, even in the piercing of only two petals, there are no less than four factors occurring at four distinct points of time ; *viz.*, (1) the action of striking the first petal with the needle ; (2) the separation of the needle from that petal ; (3) the destruction of the contact of the needle with that petal, and (4) the appearance of its contact with the second petal. In this manner in the piercing of all the petals, there are innumerable moments of time involved ; and yet the perception is as if the whole process occurred at a single moment. This shows that subtle differences of time are not perceptible ; and hence the objects of the various cognitions in a series can never be perceived as *different*.

cognised object, on the other hand, even while these are present (if the *sense-contact*, &c., happen to be absent), the cognition does not appear. And this shows that even though all the three are the *cause* of the cognition, there is a peculiarity in the causal potency of the *sense-contact*, &c., in virtue of which peculiar potency it is these latter that are regarded as the *specially efficient cause*; and it is the *specially efficient cause* that is held to be the *Instrument*; and thus it is the *sense-contact*, &c., alone that can be regarded as the '*instruments* of cognition',—and not the *cognising person or* the *cognised object*, &c.

Of these 'Instruments of Cognition' there are four; says the *Nyāya-sūtra* (I-i-3):—'Sense-perception, Inference, Analogy and Word are the four Instruments of Cognition.'

"What then is *Sense-perception*?"

Sense-perception is the instrument of *direct* right cognition; that right cognition being called '*direct*' which is brought about by the agency of the sense-organs. This Sense-perception is of two kinds—(*a*) *Savikalpaka*, Determinate or Concrete, and (*b*) *Nirvikalpaka*, Non-determinate or Abstract." The *instrument* of Sense-perception is of three kinds—(*a*) in some cases it is the sense-organ; (*b*) in others it is the contact of the sense-organ with the object perceived; and (*c*) in others again, it is Cognition.

"In what cases is the sense-organ the instrument of Sense-perception?"

In cases where the resultant perception is of the non-determinate or abstract kind,—the sense-organ itself is the instrument. The process involved in these cases is as follows:—The Soul comes into contact with the mind;—the mind with the sense-organ;—the sense-organ with the object perceived; this last factor being necessary in view of the fact that the sense-organ can manifest, or render perceptible, one object only when it gets at (is in contact with) this latter; thus then, by the instrumentality of the Sense-organ as being in contact with the object perceived, there comes about the non-determinate perception; by which is meant that perception which is free from all notions of *name, genus* and such other details, which manifests (or objectifies) the mere thing in itself as 'something' (in a vague form). Of this perception, the Sense-organ is the *instrument,* in the same manner as the axe is the instrument of the *cutting*; and the contact of the Sense-organ with the object enters into this perceptional process only as an intermediary secondary factor; just as the contact of the axe with the piece of wood does in the process of cutting; and the non-determinate perception is the *result*; like the *cutting* by the axe.

"In what case is the contact of the Sense-organ with the object the instrument of Perception?"

The sense-organ-and-object contact is the instrument in those cases where the above-mentioned *vague* perception [of the thing as 'something'] is followed by the corresponding *definite* perception, in which the 'something' is cognised as having a certain name,—'*Dittha*' for instance,—as belonging to a particular genus or class—'*Brāhmaṇa,*' for instance,—and as having a certain quality —'darkness' for instance; this perception being in the form 'this is a dark-complexioned Brāhmaṇa named Dittha,' wherein are present the notions of the *qualification and the qualified*; in this process the corresponding *vague perception* constitutes the intermediary factor; and the *definite perception* is the ultimate result.

"In what cases, lastly, is the Cognition the instrument of Perception?"

The Definite Cognition is followed by the notion of *rejectability, acceptibility* or *neutrality* with regard to the object perceived [*i.e.,* when we perceive a thing, we feel either that it is worthy only of being abandoned; or that it is worthy of being accepted; or that it is worthy of neither the one nor the other]; and in these notions (which also form a factor in the Perception), the *instrument* is the corresponding *Vague Perception*; and in this the *Definite* Perception enters as the intermediary factor; and the notion of rejectability, &c., form the ultimate result. That which is itself brought about by one and brings about another, which again is the product of the former, is called the intermediary factor;'* as for example, the contact of the axe with the piece of wood, brought about by the axe, brings about in its turn the *cutting*, which is the product of the axe. According to some people, however, in all cases of Perception, the Determinate, &c., also, it is the Sense-organ that is the actual *instrument*; all other factors, that come in, in the shape of contact and the rest, are only *intermediary factors*.

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* Thus in this last instance, the Definite Perception is brought about by the *Vague* Perception, and brings about, in its turn, the notion of rejectability, &c. In the previous cases the Vague Perception, brought about by the Sense-organ, brings about the Definite Cognition.

The contact of the Sense-organ and the object, which is the cause of *direct* right cognition, is of six kinds:—(1) Direct Conjunction, (2) Inherence in that which is in direct conjunction, (3) Inherence in that which inheres in that which is in direct conjunction, (4) Direct Inherence, (5) Inherence in that which is inherent, and (6) the relation of qualification and qualified.

(1) When the perception of the jar is brought about by the eye,—in which case the eye is the 'Sense-organ' and the jar the 'object,'—the 'contact' that there is between these two is in the form of Direct Conjunction; because the connection between them is not inseparable. Similarly, when the perception of the soul—in the form 'I'—is brought about by the inner organ of the mind,—in which case the mind is the 'organ' and the Soul the 'object,'—the 'contact' between these is of the nature of Direct Conjunction. (2) When the colour of the jar is perceived by the eye, in the form 'the colour of this jar is dark,'—in which case the eye is the 'organ' and the colour of the jar the 'object,'—the 'contact' between these is of nature of Inherence in that which is in direct conjunction: because the colour inheres in the jar, which latter is in direct conjunction with the eye. The same kind of 'contact' is present in the case of the perception, by means of the mind, of the pleasure, pain, etc., inhering in the soul.

In the perception of the Dimension of the jar, we have to admit of a further four-fold contact, over and above that in the shape of 'inherence in the conjoined'; as without such four-fold contact there could be no perception of Dimension from a distance. This four-fold contact is as follows:—(*a*) Contact of the *constituent particles* of the Sense-organ with the *whole* of the object; (*b*) of the *constituent particles of* the object with the *whole* of the Sense-organ; (*c*) of the *constituent particles* of the Sense-organ with the *constituent particles* of the object; and (*d*) of the whole of the object with the *whole* of the Sense-organ.

(3) In cases where the *generality of 'colour,'* as inhering in the *colour* that inheres in the jar, is perceived,—in which case the eye is the *Sense-organ,* the *generality of 'colour'* is the *object,*—the 'contact' between these is of the nature of 'inherence in that which inheres in that which is in direct Conjunction.'

(4) The 'contact' is of the nature of 'inherence' in the case where sound is perceived by the ear; in which case the ear is the *organ,* and sound the *object*; 'contact' of these two is of the nature of 'inherence' because the ear-organ is only a form of *Ākāśa* (as enclosed in the tympanum),—and sound is the quality of *Ākāśa*;—and the relation subsisting between a substance (*e.g.,* *Ākāśa*) and its quality (*i.e.,* sound) is of the nature of 'Inherence.'

(5) In cases where the *generality of 'sound'* as inhering in sound, is perceived by the ear,—where the ear is the *organ,* and the *generality of 'sound'* the object,—the 'contact' between these is of the nature of 'inherence in that which is inherent'; in as much as the *generality of 'sound'* inheres in the 'sound' which, in its turn, inheres in *Ākāśa.*

(6) In a case where the *absence of the jar* in a place which is in conjunction with the eye, is perceived by the eye, in the form 'the jar does not exist in this place,'—the 'contact' is of the nature of 'the qualification and the qualified;' in as much as the *place* is the 'qualified,' being qualified by 'the absence of the jar' which is the 'qualification.' Similarly when the *absence of pleasure,* in the Soul which is in conjunction with organ of mind, is perceived (by the mind),—in the form 'I am devoid of pleasure,'—the 'absence of pleasure' is the *qualification* of the 'Soul in conjunction with the mind.' And so also, when *the absence of the generality of the letter-sound 'gha'* in the letter-sound '*ga,*' which inheres in ear-organ, is perceived,—the *absence of the generality* 'gha' is the qualification of the 'ga' letter-sound inhering in the ear. Thus then, in brief, *negation,* or *absence,* is found to be perceived by the Sense-organ, through that *organ-object* contact which consists of the relation of 'the qualification and the qualified,'—this relation being based upon any one of the five kinds of relation described above (Direct Conjunction and the rest).

Inherence also is perceived in the same manner; for example, the *Inherence of the cloth* in its constituent yarns is perceived by the eye, only through the relation that it is the 'qualification' of the *yarns* which are in conjunction with the eye. Thus have been explained the six kinds of 'Contact.' On this point we have the following comprehensive verses :—

'Right cognition born of the Senses is of two kinds—*Determinate* and *Non-determinate* ; the cause of such cognition is of three kinds—[*Constituent, Non-constituent* and *Efficient*] ; and 'contact' is of six kinds ; through each of which respectively the following objects are perceived—(1) the jar ; (2) the blue colour of the jar ; (3) the generality of 'blue' ; (4) sound ; (5) the generality of 'sound' ; and (6) Negation and Inherence.

[The Bauddha Idealist objects to the postulating of *determinate* Sense-perception.]

"The non-determinate cognition, actually having for its object the *svalakṣaṇa*, or 'specific individuality', of the thing perceived, may be regarded as 'Sense-perception'; as for the Determinate Cognition, on the other hand, in as much as it pertains to inclusive or comprehensive generic forms,—just like *words* and *inferential indicatives*—its object is always in the form of the *universal* or entity, [which can never be in contact with any Sense-organ], —how can this cognition be regarded as 'Sense-perception'? Because it is only the cognition proceeding from the individual object direct that can be so regarded ; specially as it is only such an object as really exists that can give rise to any cognition ; and it is the 'specific individuality' only, and not the 'universal entity,' that has real existence ;—the 'universal entity' being entirely insignificant (a non-entity) ; in as much as its positive character is rejected by all proofs, and the only form that it has is the negative one, *viz.*, that of being the *negation of things other than those included in the entity.*"

The above is not right ; because the 'universal entity' also is as good a real entity as the 'specific individuality.'

Thus has Sense-perception been explained.

Inference.

Inference consists in the *parāmarśa* or 'deduction' of the *liṅga* or 'Probans' (indicative or Middle Term). The name 'Anumāna' or 'Inference' is given to that by means of which a certain thing is *inferred*; and as a matter of fact, it is by means of the 'deduction of the *Probans*' that things are inferred; and hence it is to this deduction that we give the name 'inference.' An example of this 'deduction' we have in the cognition that we have of the *presence of smoke* (which is the *probans* in the stock-example of Inference 'there is fire in the mountain because we see smoke issuing therefrom'); this cognition of the presence of smoke is the required 'deduction,' in as much as it is this cognition that leads directly to the inferential cognition (*anumiti*); the *inferential cognition* in the case in question is in the shape of the cognition of *fire*; and the instrument that leads to this cognition is the cognition of the presence of smoke.

Question—"What is the '*probans*'? and what the 'deduction of the *probans*'?"

Answer—That which indicates the required object by the force of invariable concomitance (*vyāpti*) is the *Probans*; as for instance, smoke is the *probans* of fire; because the necessary companionship between Fire and Smoke, that we recognise in the form of the proposition 'wherever there is smoke there is fire,' is what has been called '*vyāpti*' or 'invariable concomitance'; and it is only when this concomitance has been duly recognised that the cognition of smoke leads to the cognition of fire; consequently, in as much as the smoke leads to the inference of fire by the force of invariable concomitance, it is called the 'probans' (or 'indicative') of fire. And the third cognition that we have of this 'probans' is what has been called the 'deduction of the *probans*'. For instance, a man notices that over and over again, whenever he sees smoke in the kitchen, he finds fire there; and noticing this frequently, he comes to recognise a natural relationship between fire and smoke, in the form 'wherever there is smoke there is fire.'*

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* After this the text makes a long digression in order to prove that the relationship between smoke and fire is natural and constant, and not merely adventitious and accidental. We enclose this digression within square brackets.

[In the case where noticing the fact over and over again, that the children of Maitrī are dark-complexioned, we are led to conclude that 'whoever is the child of Maitrī must be dark,'—this conclusion being exactly similar to the conclusion with regard to the relationship between fire and smoke; yet the relationship between 'Maitrī's child' and 'dark-complexion' cannot be called 'natural'; as it is purely accidental; the 'accident' consisting in the fact of the dark-complexion of Maitrī's children being due to the mother having fed upon vegetables; that is to say, what has made the children dark is not the fact of their being Maitrī's children, but only the effects of the mother feeding upon vegetables; and it is this accidental circumstance that constitutes what has been technically called the '*upādhi*' or 'accident.' In the relationship of fire and smoke on the other hand, we do not notice any such 'accident.' If any such 'accident' were urged, we would ask—Is this *accident capable or incapable* (of vitiating the relationship)? If it were incapable, it could not be suspected to be present; and as for any *capable* 'accident,' no such is actually noticed: as a matter of fact, whenever any 'accident' is present, it does not fail to be noticed; as for example, (1) in the relationship of the smoke with fire (in the form 'wherever there is fire there is smoke') we at once notice the presence of the 'accident' in the shape of the contact of wet fuel (to which alone is the presence of smoke, in some fires, due); —(2) in the relationship of 'killing' with 'sinfulness' (in the form of the proposition 'all killing is sinful'), we notice the 'accident' in the shape of the fact of 'being prohibited in the scriptures' (which circumstance alone makes *some* killing sinful);—and (3) in the relationship between 'the child of Maitrī' and 'darkness' (in the form of the proposition 'all children of Maitrī are dark'), we notice the 'accident' in the shape of the fact of 'feeding on vegetables' (which circumstance has made *some* of Maitrī's children dark). In the case of the relationship of the fire with smoke (in the form of the proposition 'wherever there is smoke there is fire'), we fail to notice any such 'accident'; and certainly, if any 'accident' really existed, it would certainly be noticed; and because we do not notice it, we naturally conclude that the 'accident' does not exist in this case; the absence of the 'accident' being thus actually cognised by *Sense-perception*, as aided by non-perception, which in its turn aids the reasoning first described. Thus then, it must be admitted that the relation of invariable concomitance between fire and smoke is cognised by means of Sonse-perception, which makes cognisable the companionship of the two, and which is aided in this by the impression left on the mind by the frequent recognition (of the companionship), and also by the impression left on the mind by the recognition of the absence of all 'accident.' Hence the relationship of the fire with smoke must be regarded as *natural,* and not *accidental*; and it is this *natural relationship* that constitutes 'Invariable Concomitance.']

The Invariable Concomitance of the fire with smoke having been recognised in the manner described above, the cognition of smoke that one has in the kitchen is its *first* cognition; the cognition of smoke again that one has in the mountain, and such other 'subjects,' is the *second*; after this one recalls to his mind the previously recognised invariable concomitance between fire and smoke,—in the form 'where there is smoke there is fire';—and then he again notices or deduces the presence of smoke in the mountain,—in the form 'in this mountain there is smoke with which fire is invariably concomitant'; and this last cognition of smoke is the '*third* cognition.' The presence of this cognition must be accepted; as, in the absence of this cognition, we would have to rest at the proposition 'wherever smoke is there is fire;' and how could this alone prove the presence of fire? For the sake of this, it is absolutely necessary to have some such cognition as that 'there is smoke here', which alone can lead to the conclusion 'there is fire here.' This 'third cognition' is what has been called '*Parāmarśa*' or 'deduction'; and in as much as this is the direct 'Instrument' of inferential cognition, it is called '*Anumāna*' or 'Inference';—the resultant inferential cognition being in the form 'therefore there is fire in this mountain.'

"*Question*:—How is it that the very *first* cognition of smoke that one has in the kitchen, does not bring about the inference of fire?"

The reason for this lies in the fact that at that time the invariable concomitance (of fire and smoke) is not duly apprehended; and inference appears only after the invariable concomitance has been apprehended.

"In that case, when once the invariable concomitance has been apprehended, the fire in the kitchen itself should become an object of inference."

By no means ; because in the kitchen the fire is actually *seen* ; and there is no doubt with regard to its presence ; while an object of inference is always one with regard to whose presence there is some doubt, This is what has been declared by the author of the *Bhāṣya* (on Sū. I. i. 1.) in the following words :—' Reasoning operates neither towards the unknown nor towards that which is definitely known, but only towards the doubtful.'

" When a man has just reached the mountain, as soon as he has the cognition of smoke, why is he not, at once, led to the inference of fire ? At that moment, the doubt with regard to the presence of fire is certainly present ; in as much as there are no distinct evidences available either for its presence or absence."

True ; but, just as the man who has not apprehended the invariable concomitance has no inferential cognition, so also one who, after having apprehended the invariable concomitance, happens to forget it ; because *the remembrance of invariable concomitance* also is a necessary factor in the accomplishing of inference. What happens in the case of actual inference is that on seeing the smoke (in the mountain), the memory being aroused, the man remembers the invariable concomitance (of fire and smoke)—in the form of the proposition ' wherever there is smoke there is fire, as in the kitchen' ; thus then, the cognition of smoke that follows after the perception of smoke and the remembrance of its invariable concomitance, is its *third* cognition,—in the form ' there is smoke here (in the mountain)' ; and it is only this last ' third cognition,' and no other cognition, that leads directly to the inferential cognition of fire ; it is this again which is called ' *Anumāna* ' and ' *Liṅgaparāmarśa* ' or ' deduction of the *probans*.' For these reasons we conclude that Inference or *Anumāna* is the ' deduction of the *probans*.'

Inference is of two kinds—(1) ' *Svārtha*,' ' for one's own sake,' and (2) ' *Parārtha*,' ' for the sake of others.' The former is that which serves the purpose of bringing conviction to one's own self ; *e.g.*, when a man has himself seen the smoke in the kitchen and has apprehended its invariable concomitance with fire ;—if he happens to go near a mountain and sees an unbroken sky-kissing line of smoke issuing from it ; this perception of smoke arouses his memory, whereby he remembers the invariable concomitance, in the form ' wherever there is smoke there is fire'; after this comes his cognition 'here in the mountain also there is smoke'; and this leads him to the conviction 'therefore there is fire also here in the mountain'; this inference thus having its sole end in the bringing of conviction to the man himself. When on the other hand, a man having himself inferred, in the above manner, the presence of fire, wishes to carry conviction to another person; and for this purpose, puts forward the full syllogism with its five 'members' or propositions,—the resulting inference is called '*Parārtha*,' *i. e.*, 'for the purpose of carrying conviction to another person.' This syllogism is in the following form :— '(1) This mountain contains fire ;—(2) because it contains smoke ;—(3) all that contains smoke contains fire, *e.g.*, the kitchen ;—(4) this mountain contains smoke ; —(5) therefore this mountain contains fire.' By means of this syllogism, containing as it does the five propositions representing the 'statement of the desired conclusion' and the other four 'members' or 'factors' (of syllogism),—by means of which five propositions the *probans* comes to be represented in five forms,—the other person (to whom the syllogism is addressed) becomes convinced of the presence of fire ; and it is for this reason that this inference is called '*Parārtha*,' 'for the sake of another person.'

In the above syllogism, the presence of fire in the mountain is what is sought to be proved by the inference, and is called on that account, the '*sādhya*,' the '*probandum*' 'that which is to be proved'; and the presence of smoke is the 'reason,' called '*hetu*,' the '*probans*'. The *probans*, in this case, is of the '*positive-negative*' kind, in as much as between this (and the *probandum*) the invariable concomitance is both *positive* and *negative* ; that is to say, we have the *positive* concomitance in the form 'wherever there is smoke there is fire, as in the kitchen,' —in as much as in the kitchen we have the *presence* of both smoke and fire ; similarly we have also a *negative* concomitance in the form 'where there is no fire there is no smoke, as in the lake,'—this being called '*negative* concomitance,' in as much as in the lake, we have the concomitance of the *absence* of both smoke and fire. The peculiar feature in the *negative* concomitance is that which, in the *positive* concomitance, is the *pervaded* (*i.e.*, the less extensive),—the *negation* of that becomes the *pervader* (the more extensive) in the *negative* concomitance ; while that which is the *pervader* in the *positive* concomitance, the negation of that becomes the *pervaded* in the *negative* concomitance. This is what has been expressed in the following verses :—

'The *pervaded* and *pervasive* character of two positive entities (taken as related) becomes subverted in the case of the negations of those entities.' (Kumārila's *Ślokavārtika*, 'Anumāna,' 121).

'In the case of a positive inference, the *probans* is the *pervaded* (less extensive) and the *probandum* the *pervader* (the more extensive) ; and *the negation of the probans* becomes the *pervader*, while the *negation of the probandum* becomes the *pervaded*.'

'(In the statement of invariable concomitance) it is the *pervaded* that should be mentioned first ; and then the *pervader* ; and it is only when the invariable concomitance is thus stated that it becomes clearly discernible in its true form.'

Thus then we have seen that in the case of 'presence of smoke' being the *probans*, we have the *positive* as well as the *negative* invariable concomitance : but in the actual presenting of the syllogism, it is only the concomitance in the *positive* form that is stated ; and this is due to the fact that the purpose of the speaker is fulfilled by the statement of one only (which makes the statement of the other superfluous) ; and the one that is stated is in the *positive* form, because that is the straighter or simpler of the two ; and that which can be accomplished by the simpler method, for the accomplishment of that it would not be right to have recourse to the more complicated method : and the non-statement of the negative concomitance is not due to the absence of such concomitance. Thus then, we conclude that the *probans*, in the shape of *the presence of smoke*, is of the 'positive-negative' kind. To the same class belong also such other *probans* as *the character of being a product* and so forth, which are brought forward to prove the *probandum* in the shape of 'non-eternality' and so on.

There are some *probans* that are purely 'negative'; for instance when the *presence of breathing* is put forward as the *probans* or reason to prove the *presence of soul* ; the syllogism being presented in the following form :—'The living body has a soul, because it breathes—that which has no soul does not breathe, as for example—the jar,—this living body is not so (*i.e.*, it does not not-breathe),

—therefore it must have a soul.' Here the presence of soul in the living body is the *probandum*, and the presence of breathing is the *probans*; and this *probans* is of the purely 'negative' kind; because there is no *positive* concomitance between the two; in as much as the positive concomitance could only be in the form 'that which breathes has a soul'; but in support of this we could cite no corroborative instance (the mention of which is a necessary factor in all invariable concomitance); and the reason for this absence of a corroborative instance lies in the fact that *all* living bodies are included in the 'subject' of the syllogism (and hence no 'living body' is left that could be cited as the instance). All definitions of things should be regarded as a *probans* of the 'negative' kind; for instance, when earth is defined as *that which possesses smell*, this may be stated in the form of the following syllogism:—'The thing in question must be regarded as *Earth*, because it possesses smell,—that which is not regarded as *Earth* does not possess smell, *e.g.*, water.' Similarly, when we define *Pramāṇa* as the 'instrument of right cognition,' we may state this in the form of the syllogism—'Sense-perception and the rest must be regarded as *Pramāṇa*, —because they are instruments of right cognition,—that which is not regarded as *Pramāṇa* is not the instrument of right cognition, —*e.g.*, wrong Sense-perception,—the real Sense-perception is not what is not the instrument of right cognition,—therefore it must be regarded as *Pramāṇa*.' If the concomitance in this case were to be stated in the positive form, it could only be in the form —'that which is the instrument of right cognition is always regarded as *Pramāṇa*'; but for this we could have no corroborative instance;—all *Pramāṇas* being included in the 'subject.' What is the *probandum* here is the *being regarded* as *Pramāṇa*, and not the *being Pramāṇa*; because the *Pramāṇa* being synonymous with 'instrument of right cognition,' if it were the *probandum*, the *probans* and the *probandum* would become identical; and the *probans* would become open to the fallacy known as equality with the *probandum*.' We have thus described the *probans* of the 'negative' kind.

Some *probans* are of the purely 'positive' kind. For instance, in the syllogism—'Sound is predicable because it is knowable, whatever is knowable is predicable *e.g.*, the jar,—sound is knowable, —therefore it must be predicable,'—the *predicability* of sound is the *probandum*, and its *knowability* is the *probans*. This *probans* is purely 'positive' or universally affirmative ; because the negative concomitance could be stated only in the form—' that which is not predicable is not knowable '; but in this case we could have no corroborative instance ; in as much as there is no such thing as is not predicable ; specially as in all cases it is only a well-known thing that can be cited as instance ; and every one of such things is found to be both 'predicable' and 'knowable.'

Of these three kinds of *probans,—viz.*, the 'positive-negative' the 'purely negative' and the 'purely positive'—that which is of the 'positive-negative' kind can establish its *probandum*, only when it is endowed by all the five qualifications, and not when it is wanting in even one of these. These five qualifications are as follows :—(1) the *probans* must subsist in the 'subject'; (2) it must subsist in something in which the presence of the *probandum* is fully recognised ; (3) it should be ever apart from all such things in which the *probandum* is known not to subsist ; (4) its object should be one that is never liable to being sublated or contradicted and (5) it should not be liable to be met and counteracted by another *probans* to the contrary. All these five qualifications are found to be present in all such *probans* as 'the presence of smoke' and the like ; for instance, (1) the smoke is present in the mountain which is the subject ; (2) it exists in the kitchen, where the presence of the *probandum* 'fire' is definitely recognised ; (3) it is never present in any such place as the lake, where the *probandum*, fire, is known never to subsist ; (4) its object is never liable to being contradicted ; because its object is the *probandum*, 'presence of fire ;' and this presence of fire is not found to be sublated or contradicted by any valid means of knowledge ; (5) similarly, the *probans* 'presence of smoke' is not liable to be met and counteracted by another *probans* to the contrary ; in as much as the 'probans to the contrary' is that which establishes a conclusion contrary to the original *probandum* ; and as a matter of fact no such *probans* is found in the case of the 'presence of smoke' (establishing the presence of fire). Thus then we find that all the five qualifications are present in the *probans*, 'presence of smoke,' which for this reason, is accepted as that which proves or establishes 'the presence of fire.'

That the fire (*probandum*) is present in the 'subject' (the mountain) is proved by the presence of the *probans* (smoke) in this latter; and thus in all Inferences, there are two factors—the *invariable concomitance* and *the character of subsisting in the 'subject'* [both belonging to the *probans*]. From out of these two, what *the invariable concomitance* proves is the *probandum* in its general form; while what the *character of subsisting in the 'subject'* proves is a particular feature of the *probandum,* in the shape of its being related to the 'subject'; for instance, '*the presence* of smoke' in the mountain proves that the fire also is related to (*i.e.*, exists in) the mountain. If this particular feature of the *probandum* were not proved by the character of the *probans* subsisting in the 'subject,' then,—in as much as the mere *probandum* in its general form will have been already established by the 'invariable concomitance,' there would be no need for the other steps in the inferential process.

As was seen to be the case with the *presence of smoke,* so is the case with all positive-negative *probans*; all these can operate as true '*probans*' only if endowed with the above-mentioned five qualifications. Failing in this, they become mere semblances of the true '*probans,*' and not the true *probans.*

As for the 'purely positive' *probans,* this establishes its *probandum,* when endowed with four of the above five qualifications; as in this case it is not possible for the *probans* to be 'ever apart from that in which the *probandum* is known not to subsist'; for the simple reason that there is no such thing in which the probandum is known not to subsist.

As regards the purely negative *probans,* this also is endowed with only four qualifications; because in this case it is not possible for the *probans* to subsist in something in which the presence of the *probandum* is fully recognised; for the simple reason that there is no such thing in which the *probandum* is known to subsist.

"What do you mean by the words *Pakṣa, Sapakṣa* and *Vipakṣa?*"

That object in regard to which the presence of the probandum is doubtful, is called the *Pakṣa* or 'subject'; *e.g.*, in the inference of fire from smoke in the mountain, the mountain is the '*Pakṣa*'. The *Sapakṣa* is that object in which the presence of the *probandum* is fully and definitely recognised; *e.g.*, in the above inference, the *kitchen.* The '*Vipakṣa*' is that object in which it is well known that the *probandum* does not subsist ; *e.g.*, the *lake*, in reference to the same inference.

Thus have been described all the three kinds of *probans*, the positive-negative,' the 'purely positive' and the 'purely negative.' Those that are other than these are not true *probans* ; they are mere 'semblances of the *probans*' or 'Fallacious Reasons' (*Hetvābhāsas*).

'The Fallacious Reasons' are of the following five kinds :—(1) The '*Asiddha*,' 'unproven or unknown'; (2) the '*Viruddha*,' 'contradictory'; (3) the '*Anaikāntika*,' 'Inconclusive'; (4) the *Prakaraṇasama*,' 'stultified or neutralised'; and (5) the *Kālātyayāpadiṣta*,' 'Belated or annulled.'

(1) The 'Unproven Probans' is that with regard to which there is no certainty as to its being a true *probans*. This is of three kinds, —(*a*) *That which has an unknown subject* (*Āśrayāsiddha*) ; *e.g.*, in the syllogism 'the sky-lotus is fragrant, because it is a lotus, like the lotus in the tank,' the 'sky-lotus' is the subject of the 'character of being lotus' (which is the intended *probans*) ; and there being no such thing in existence, the *probans* is one whose receptable is unknown. (*b*) *That whose very form is not known* (*Svarūpāsiddha*) ; *e.g.*, in the syllogism, 'sound is transitory, because it is visible by the eye, like the jar,'—'visibility' is the intended *probans* ; and in as much as sound is *audible*, and never *visible*, the *probans* is one whose very form is not known. (*c*) *That which has its invariable concomitance not known* or *ascertained* (*Vyāpyatvāsiddha*) ; this is of two kinds—the first is that which is due to the absence of any evidence for the required invariable concomitance ; and the other is due to the presence of 'accidents'; an example of the former we have in the syllogism—'sound is momentary, because it is an entity,—every entity is momentary, *e.g.*, the mass of clouds'; as we have no proof for the invariable concomitance of *momentariness* and the *character of being an entity*, we do not include this fallacy under that '*Vyāpyatvāsiddha*,' whose fallaciousness is due to the presence of 'vitiating accidents,' because, such including would imply (on our part) the acceptance of the view that Sound is momentary ; as this regarding of the fallaciousness in this manner would only mean that the 'momentariness' in question is due to causes other than that of *being an entity*.

An example of this fallacy as due to the presence of 'accidents' we have in the syllogism—'the killing of animals occurring in sacrifices is sinful, because it is killing, like any other killing apart from sacrifices'; in connection with this it has to be borne in mind that what makes the killing 'sinful' is not its character of *killing* but its being prohibited in the scriptures; and this something else to which the character in question (the predicate of the conclusion) is due is called the 'accident'. The 'accident' (in regard to a syllogism) has been defined as 'that which, while pervading the *probandum* (*i.e.*, having the *probandum* invariably concomitant with itself), does not pervade the *probans*'; and this definition is applicable to the *character of being prohibited* (taken in relation to the aforesaid syllogism); inasmuch as *prohibitedness* pervades *sinfulness*; *i.e.*, whatever is *sinful* is always something that is *prohibited*; and yet the same character does not pervade the *probans* —'being *killing*,' inasmuch as it is not true that *all killing* is *prohibited*; as the killing in connection with sacrificial performances is *not prohibited*. Thus then, inasmuch as the *character of being killing* is made (in the syllogism) dependent upon the invariable concomitance of something else (*i.e.*, *character of being prohibited*),—the syllogism becomes open to the fallacy of 'having its invariable concomitance not duly known or ascertained.'

(2). The *Contradictory Probans* is that which is pervaded by the contrary of the *probandum*,—*i.e.*, with which the contrary of the probandum is invariably concomitant. For instance, in the syllogism—'sound is eternal, because it is a product, like the soul,'—the *character of being a product*, which is the *probans*, is pervaded by 'non-eternality' which is the contrary of 'eternality,' the *probandum*; inasmuch as it is a well-known fact that whatever is *a product* is *non-eternal*; and thus 'being a product' becomes, (in this syllogism) a *contradictory probans*.

(3). The *Inconclusive Probans* is that which is found to be fallible or anomalous. This is of two kinds:—(*a*) That anomalous *Probans* which is *too wide*, and (*b*) that which is *too narrow* (unique). The 'too wide' is that which subsists in that in which the *probandum* is known to be present, as well as in that in which the *probandum* is known to be absent; *e.g.*, in the syllogism,—'sound is eternal, because it is knowable, like the *Ākāśa*,'—the *probans* is 'knowability'; and it is found to subsist in things *eternal* as well as *non-eternal* (*i.e.*, things in which eternality, the *probandum*, is present, and also the things in which it is absent). The 'too narrow' *probans* is that which subsists neither in that wherein the *probandum* is known to be present, nor in that wherein the *probandum* is known to be absent ; *e.g.*, in the syllogism—' the earth is eternal, because it is odorous,'—we have 'odorousness' as the *porbans* ; and this subsisting in the earth alone, cannot subsist in any other eternal or non-eternal things.

(4) The 'Neutralised Probans' is that in whose case it is found that there is available another *probans* which proves the contrary of the *probandum* of the former ; *e.g.*, in case of the syllogism–' sound is non-eternal, because it is devoid of properties belonging to eternal things' ; it is found that another syllogism is available, in the form—' sound is eternal because it is devoid of properties belonging to non-eternal things,'—which proves a conclusion directly contrary to the conclusion of the former syllogism. This fallacy has also been called '*Satpratipakṣa*.'

(5) The 'Annulled Probans' is that the contradictory of whose *probandum* is known to be present in the 'subject,' by means of other (and more authoritative and trustworthy) means of knowledge ; this fallacious *probans* also being called '*Bādhita*'; an example of this we have in the syllogism—' fire is not hot, because it is a product, like water '; here it is found that 'the character of being a product' is the *probans* ; and this has been put forward to prove *the absence of heat* in fire ; but the presence of heat in fire is known by means of Tactile Sense-perception (which is more trustworthy than Inference).

Thus has Inference been explained.

Analogy.

Upamāna, 'Analogy,' is the cognition of a certain body or thing as similar to another thing, the cow for instance,—such cognition being helped by the remembrance of an indicative declaration (bearing upon the subject). As for example, the man from the city, not knowing what the *gavaya* is, hears from a certain forester the declaration that 'the *gavaya* is similar to the cow'; subsequently, going to the forest, if he happens to remember that declaration, and at the same time sees an animal resembling the cow,—there appears in him the cognition of this animal as being similar to the cow, which cognition is helped by his remembrance of the aforesaid indicative declaration ; and this cognition is called '*Upamāna*' 'Analogy', inasmuch as it is the means or instrument of '*Upamiti,*' 'Analogical Cognition'; this 'analogical cognition' consists in the cognition of the relation of *name-and-named* between the word ('*gavaya*' for instance) and the thing named by it (the animal *gavaya*); the cognition, in this particular case, appearing in the form 'this thing is named *gavaya*'. This same analogical cognition is the *result* of Analogy. This Analogy has been regarded as an independent *Pramāṇa* or Instrument of Right Knowledge; because it brings about a right cognition that cannot be brought about by Sense-perception or Inference.

Thus has Analogy been explained.

Word.

'*Śabda*' or Word' (as a *Pramāṇa*) consists in the assertion of a trustworthy person. A 'trustworthy person' is one who speaks of things as they really exist; and 'assertion' or 'sentence' is the collection of such words as are dependent upon (or in need of) one another, are endowed with the capability of being construed together, and are in close juxta-position to one another. It is in view of this definition of 'sentence' that such words as 'cow—horse—man—elephant' are not regarded as a 'sentence,' inasmuch as there is no 'mutual need,' or 'dependence' among the words; similarly the collection of such words '*agninā siñchet*' ('spray with fire') is not regarded as a 'sentence,' because the two words are not capable of being construed together; that is to say, what the instrumental ending in the word '*agninā*' denotes is the *instrumentality* of fire towards the '*spraying*'; but as a matter of fact, the fire is not possessed of the capability of acting as the instrument of *spraying* (which can be done with water only), and thus there being no capability, in the *fire* and in the *spraying*- of being related to each other in the relation of cause and effect, the words 'spray with fire' is not regarded as a 'sentence.' Similarly also the words 'bring the cow,' are not regarded as a 'sentence,' when each of them is pronounced at distant intervals of time, being separated by periods of three hours or more; and the reason for this is that, even though the words are 'interdependent,' and even though they are endowed with the capability of being construed together, yet they are not in close juxtaposition. Thus then, a real 'sentence' is that which is made up of such words as are interdependent, capable of being construed together and in close juxtaposition; *e.g.*, the words—' *Jyotiṣṭomena Svargakāmo Yajeta* [' one desirous of attaining heaven should perform the *Jyotiṣṭoma* sacrifice,']—or, ' *Nadītīre Phalāni Santi* ' [' there are fruits on the river-bank '],—or, lastly the aforesaid words ' *Gām-ānaya* ' [' bring the cow '] when pronounced in close succession.

An objection is raised :—" Even in such sentences (as ' *Nadītīre Phalāni Santi* ', the 'mutual need' that we find is not among the *words*, but among the *things* denoted by them ; that is to say, the *fruit* (denoted by the word ' *Phalāni* ') is something that needs a substratum, and the *river-bank* being such a substratum, we have the ' need ' of the *fruit* for the river-*bank*. In reality, however, if we ponder over the matter we find that there is no mutual need among the *things* either ; because 'need' (*Ākāṅkṣā*), being a form of desire, can subsist only in conscious or sensate beings."

True ; but what occurs is that when a man hears certain words pronounced, and knows the things denoted by them, these things, being thus known, produce in the mind of the man a feeling of mutual need or interdependence among themselves ; and being thus productive of the notion of ' mutual need,' the things are spoken of as ' interdependent '; and indirectly through the things, the *words* expressive of them also come to be spoken of as ' interdependent.' Or, it may be that the words themselves, having denoted the things, produce in the mind of the person, a feeling of the ' need ' of other things ; and thereby the words come to be spoken of as ' interdependent.'

The ' juxtaposition ' of words consists of their being uttered by one and the same man, without much delay (in the utterance of the several words) ; and this is among the words themselves directly, and not through the things denoted by them.

Thus then, the final definition of the ' sentence ' may be thus stated :—The sentence is the collection of such words as are in close juxtaposition,—are expressive of things capable of being interrelated,—and produce, through the denotation of things, a feeling, in the mind of the person hearing them uttered, of either the words themselves standing in need of other words, or of the things denoted by the words standing in need of those denoted by other words.

A *Word* again is a collection or group of letters, and the 'collection' or 'group' is not *real,* but *ideal,—i.e.,* the letters are regarded as forming a 'group' only because they are conceived of as such; the number of letters falling under one conception being regarded as one 'group'. When a word is pronounced, the letters appear one after the other; and as each is quickly destroyed, there is no possibility of the hearer perceiving, at any one moment, more than one letter; hence what happens is that having, in due succession, heard each of the preceding letters, when he hears the last letter of the word, there is produced in his mind by the auditory organ, the idea of the whole word,-this idea objectifying both what actually exists at the time (the last letter) and what is no longer existent (the preceding letters); and the production of this idea by the auditory organ is due to the fact that the ear, aided by the impression of each of the preceding letters, comes into direct contact with the last letter, and is further helped by the notion (that may be present in the mind) of what is expressed by the component factors of the word. The auditory organ is able to bring about such a cognition, by reason of the peculiar efficiency of its auxiliaries; just as we find to be the case with Recognition, in the perception whereof, the previous condition, even though *past,* yet appears in the perception of the *present* (by the force of impressions and such auxiliaries). In the same manner, the idea of one whole sentence, objectifying more than one word, is brought about by the ear-organ, in contact with the last word, and aided by the impressions left by the perceptions of the preceding words, and also by the notion of what is expressed by the words.

When the above-defined 'Sentence' is uttered by a trustworthy person it becomes what we called the 'Word' regarded (as an *instrument of right cognition.*) The *result* of this instrument is the knowledge of what is meant by the sentence. And this 'Instrument of Right Cognition' is available in ordinary parlance, as well as in the Veda; in regard to ordinary parlance, however, there is this peculiarity that only some, and not all, speakers are 'trustworthy'; and hence it is only a few of such sentences, only those uttered by trustworthy persons, that are 'Instruments of Right cognition.' In the Veda, on the other hand, every one of the sentences is the work of God, who is supremely trustworthy; and hence all Vedic sentences, being the 'utterances of a trustworthy person,' are 'instruments of right cognition.'*

The four Instruments of Right Cognition have been described. We do not admit of any other such Instruments; of those postulated by others, those that are valid and real, are included in these four.

An objection is raised:—"Arthāpatti or Presumption also is a distinct Instrument of Right Cognition; when one perceives a certain fact which, on the face of it appears incongruous or inconsistent, the assumption of that which removes the incongruity, or explains the inconsistency, constitutes what has been called 'Presumption.' For instance, when it is either seen or heard that Devadatta is fat, and yet he does not eat during the day, (there is an inconsistency, for removing which) the fact of his eating at night is presumed; because for one who does not eat during the day, it is not possible to be fat, unless he eat at night; hence the only 'instrument for the right knowing of the fact of his eating at night, consists in the 'Presumption' based upon the inconsistency of the fatness; and this must be regarded as distinct from Sense-perception and the other 'Instruments of Right Cognition, inasmuch as what is cognised by the said presumption cannot be cognised by any of those Instruments of Cognition."

This is not right; because the fact of eating at night is cognised by means of Inference; the inference being in this form:—'this Devadatta eats at night,—because he is fat, though he does not eat during the day,—one who does not eat at night is never fat if he does not eat during the day,—as for instance, the man whom we find to be not fat, if he does not eat either during the day or at night;—this person is fat and eats not during the day,—therefore he cannot be non-eating at night.' Thus we find that the night-eating is cognised by means of a universal negative Inference; for what purpose then should we assume another 'Instrument of Cognition' in the shape of 'Presumption'?

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*At this point there is a long digression in one of the manuscripts, dealing with the question of the existence of God. The commentary has not touched upon this passage; nor is this the right place for the discussion, which, if the author wished to include it in his work, would be more in place, under the treatment of 'Ātman' later on. We therefore omit this long passage in the translation.

A further objection is raised :—" Negation must be a distinct 'Instrument of Right Cognition'; its postulating being necessary for the purpose of the cognising of the absence of things. For instance, the absence of the jar is ascertained by the non-perception of the jar; and 'non-perception' is only the negation of perception; hence it is by means of Negation that the absence of the jar is cognised."

This also is not right; because the absence of the jar is actually cognised by Sense-perception as aided by the non-perception (of the jar) and the reasoning embodied in the form, 'if the jar had existed here, it would have been perceived, in the same manner as the spot is perceived.'

" But, as matter of fact, the Sense-organs can apprehend only such things as are in contact with them; as in all cases of Perception what happens is that the Sense-organs illumine (or render cognisable) the object only after it reaches (comes into contact with) it ;—and that this is so, is proved by the fact that it is an instrument of cognition like light; or the agrument may be stated thus:—'the Ear and the Eye are illuminative of their objects only on reaching their objects,—because they are external organs,—like the organ of touch,' the fact that the organ of touch comes into actual contact with the object it apprehends is admitted by all parties. There is, however, no relation between *Absence* and the Sense-organs; Conjunction and Inherence are the only two relations, and neither of these is possible (between Absence and the Sense-organs); because in the first place, it is only between two substances that there is Conjunction, and Absence is not a substance; and as for Inherence (there being no inseparable relation between the two, no Inherance) is possible. As for the relationship of the *qualification and the qualified*, this cannot be regared as a 'relation'; because it is not *one* subsisting in two things distinct from itself; a 'relation' is always distinct from the two things related; and is one only, while subsisting in both of those things. As for example, the Conjunction of the drum and the stick; this Conjunction is something totally different from the drum and the stick, and is *one* while subsisting in both the drum and the stick. The relation between the Qualification and the Qualified is not of this character; because the relation between the man and the stick he carries is that of the Qualification and the Qualified; and this is not distinct from the man and the stick; inasmuch as *the character of Qualification* belonging to the stick is not something distinct from itself; nor is this *qualifiedness* of the man distinct from the man; both being identical with the forms of the two things (the stick and the man) respectively. Similarly in the case of Negation, or Absence, also, it must be the *qualification* as well as the *qualified*; as it is not possible for substance or any other category to subsist in Negation. Consequently the *character of 'qualification'* as belonging to the Negation must consist in its own form, which consists in its capability of bringing about a cognition tainted with itself; and this is not something distinct from the Negation (and thus the relationship is not different from the members related). Similar arguments may be urged against the postulating of such relationships as those of the *Pervader and the Pervaded, the cause and effect,* and so forth. For instance, the *pervasiveness* (character of pervading) as subsisting in the fire is nothing more than that particular form of the fire itself which consists in its capability of bringing about the idea of something concomitant with it; similarly the character of the Cause also, as subsisting in the Yarns, is only that which is concomitant, both positively and negatively, with the effect (Cloth); and it is not something different from the Yarns themselves. In the same manner, while Negation also is both the *pervader* and the *Cause,* there is no possibility of such character being any such thing (other than Negation itself) as Generality and the like. Thus then we find that the relation of the Qualification and the Qualified is neither distinct from the things related; nor does it subsist in both the members related; because it is only the character of Qualification that subsists in the Qualification; and the character of the Qualified does not subsist in it; and similarly in the Qualified also, it is only the character of the Qualified that subsists, and not the character of the Qualification. Then again, in the compound '*Viśeṣyaviśeṣaṇabhāva*' (by which the relation is sought to be named), the word '*bhāva*' ('character') appearing after the copuative compound '*Viśeṣyaviśeṣaṇa*' could not be construed with each of the two members of that compound, if the '*bhāva*' were only one; hence the word has to be repeated; whereby we have two characters—(1) that of the qualification, denoted by the word '*Viśeṣaṇabhāva*' and (2) that of the qualified, denoted by the word '*Viśeṣyabhāva*'; while the relation is *one* only; consequently there can be no such relation as *Viśeṣaṇaviśeṣyabhāva*.' Similarly there can be no such relations as '*Vyāpyavyāpakbhāva*' (that of the Pervader and the Pervaded), and the like. Then as regards the actual application, in usage, of the name 'relation' to these (*Viśeṣaṇavishcṣyabhāva*, &c.)—this must be regarded as an indirect or figurative application, due to this similarity that, like the real relation, these so-called relations also are cognisable only through the cognition of the two members concerned. Thus then the upshot of all this is that Negation or Absence, cannot be perceived by the Sense-organs, being as it is, incapable of any relation (without which the Sense-organs cannot operate)."

(Reply)—True; but the law that 'the Sense-organs apprehend only such things as are related to them,' is true only with regard to the perception of positive things; by virtue of which, when the senses apprehend a positive object, they can do so only when the object is related to them; this law however does not apply to the apprehension of negative entities,—the apprehension whereof is brought about by the senses, only through the relation of qualification and qualified. As for the objection that,—'if the senses apprehended things not related to them (*e.g.*, negation), then they would apprehend anything and everything',—this is refuted by pointing out that what is held is that the senses apprehend only such negation or absence as qualify a definite object (and not any negation at random); and this is the case with the view of the opponent also [inasmuch as even though, according to him the *Absence* is cognisable by means of Negation as an instrument of knowledge, it can be cognised only as the qualification of something definite]. And if there are objections to this, they would be applicable to both views equally; and such objections, for that reason, should not be put forward by either of the two disputants.

In connection with the Instruments of Right Cognition we proceed to consider the following matter—In most cases, when the man has cognised the water, and has assured himself of the validity of his cognition, he proceeds to take up the water;

but in some cases, the mere suspicion or doubtful knowledge of the presence of water leads the man to proceed to take up the water; and it is only after he has found the water to be actually present that he becomes assured of the validity of his original cognition. Such are the facts ; and upon these some people opine as follows :— " In all cases , the man proceeds to activity after having previously ascertained the validity of his cognition ; in as much as the validity of cognitions is self-evident and self-assured. That is to say, whenever a man has a certain cognition, at that same time he also recognises the validity of that cognition ; the apprehender of the validity of the cognition not being different from the apprehender of the cognition itself ; and it is this *independence of any apprehender other than that of the cognition itself* that constitutes the ' self-sufficiency ' of the validity of the cognition. There is no doubt that the cognition itself is apprehended before the activity ; for, if it were not so, wherefore could there arise any doubt as to its validity or otherwise ? Certainly, until the object of the doubt has been cognised, the doubt cannot arise. Thus then, the Cognition itself being already apprehended by the instrumentality of Presumption based upon the impossibility of its *apprehendedness* (except on such apprehension) the validity of that cognition comes to be apprehended by means of Presumption ; and thereupon follows the action of the man. And it is not true that at first the cognition alone is apprehended, and its validity is apprehended only after the resultant activity of the man leads to his attaining the object of that cognition."

In answer to the above we argue as follows :—We do not admit that the Cognition is apprehended by the instrumentality of the Presumption based upon the impossibility of its *apprehendedness* (except on such apprehension) as has been declared above; we are all the further away from admitting that the validity is also apprehended by Presumption. To explain : what our opponent means may be stated thus :—" As soon as one has the cognition of the jar, there is recognised the *apprehendedness* of the cognition, in the notion expressed in the words ' the jar is cognised by me' ; and from this it is inferred that when the cognition is produced, there is produced in it a certain property in the shape of *apprehendedness* ; and in as much as this *apprehendedness* had not been produced before the cognition,—and is produced upon the each of the two members of that compound, if the '*bhāva*' were only one ; hence the word has to be repeated ; whereby we have two characters—(1) that of the qualification, denoted by the word '*Viśeṣaṇabhāva*' and (2) that of the qualified, denoted by the word '*Viśeṣyabhāva*'; while the relation is *one* only ; consequently there can be no such relation as *Viśeṣaṇaviśeṣyabhāva*.' Similarly there can be no such relations as '*Vyāpyavyāpakbhāva*' (that of the Pervader and the Pervaded), and the like. Then as regards the actual application, in usage, of the name 'relation' to these (*Viśeṣaṇavisheṣyabhāva*, &c.)—this must be regarded as an indirect or figurative application, due to this similarity that, like the real relation, these so-called relations also are cognisable only through the cognition of the two members concerned. Thus then the upshot of all this is that Negation or Absence, cannot be perceived by the Sense-organs, being as it is, incapable of any relation (without which the Sense-organs cannot operate)."

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but in some cases, the mere suspicion or doubtful knowledge of the presence of water leads the man to proceed to take up the water; and it is only after he has found the water to be actually present that he becomes assured of the validity of his original cognition. Such are the facts; and upon these some people opine as follows:—"In all cases, the man proceeds to activity after having previously ascertained the validity of his cognition; in as much as the validity of cognitions is self-evident and self-assured. That is to say, whenever a man has a certain cognition, at that same time he also recognises the validity of that cognition; the apprehender of the validity of the cognition not being different from the apprehender of the cognition itself; and it is this *independence of any apprehender other than that of the cognition itself* that constitutes the 'self-sufficiency' of the validity of the cognition. There is no doubt that the cognition itself is apprehended before the activity; for, if it were not so, wherefore could there arise any doubt as to its validity or otherwise? Certainly, until the object of the doubt has been cognised, the doubt cannot arise. Thus then, the Cognition itself being already apprehended by the instrumentality of Presumption based upon the impossibility of its *apprehendedness* (except on such apprehension) the validity of that cognition comes to be apprehended by means of Presumption; and thereupon follows the action of the man. And it is not true that at first the cognition alone is apprehended, and its validity is apprehended only after the resultant activity of the man leads to his attaining the object of that cognition."

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[This, we hold, is not right; because *Apprehendedness* is nothing apart from the character of being the object of cognition.]

The opponent retorts—"The jar is said to be the 'object of cognition' only in virtue of its being the substratum of the *apprehendedness* produced by the cognition. Because the said *objectivity* (of the jar) cannot be of the nature of identity; no identity being possible between the jar and the cognition, of which one is the object (*viṣaya*) and the other the subject (*viṣayin*). If the 'objectivity' consisted in the fact of the cognition being produced from (or proceeding from) it, then that objectivity would belong to the Sense-organs and such other sources from which cognition is produced. This leads us to the inference that by the cognition there has been produced in the jar something whereby that jar alone, and nothing else, becomes the *object* of that cognition,—(and this something is what we call *apprehendedness*). It is in this manner that the *apprehendedness* is proved not only by direct Sense-perception, but also by Presumption based upon the impossibility of the said *objectivity*."

This is not right, we reply. Because, as a matter of fact, the *objective* and *subjective* characters proceed from the very nature of things; that is to say, there is a natural peculiarity in the object and its cognition, by virtue of which one is the *object* and another the *subject* in relation to the other. If this were not so, then no objectivity could belong to past and future things, as it is not possible for any *apprehendedness* being produced in these by cognition; in as much as it is not possible for a property to be produced in an object that does not exist at the time (and *apprehendedness* is only a property). Then again, in as much as the *apprehendedness* also, in its turn, would be the object of its own cognition, that would necessitate the assumption of another *apprehendedness*, and thus there would be no end to the number of *apprehendedness* thus assumed. If, in order to avoid this, the objectivity of the *apprehendedness* were held to be something inborn in itself, independent of any further *apprehendedness*,—then the same might be admitted with regard to the jar and such other things also; what then would be the necessity of assuming any *apprehendedness* at all? Even if (for the sake of argument) we admit of such a thing as *apprehendedness*,—even in that case, the cognition would be indicated by mere *apprehendedness* in general; while its validity would be indicated by a particular form of *apprehendedness*,—that form which is in consonance with the cognition of the instrument of right cognition; and such being the case, how can the validity of the cognition be held to be apprehended by the apprehender of the cognition itself? If there were some such peculiar *apprehendedness*, in consonance with the cognition of the instrument of right cognition, by which the cognition and its validity were both apprehended simultaneously;—then the same might be said with regard to *invalidity* also; namely, that there is some such peculiar *apprehendedness* in consonance with the cognition of the instrument of invalid cognition, by virtue of which this cognition and *invalidity* are both apprehended simultaneously; and thus the invalidity of the cognition also might be regarded as self-evidenced. If, even in face of this, the *invalidity* of the cognition be held to be due to extraneous circumstances, then its validity also should be due to extraneous circumstances,—that is to say, apprehended by means other than that which apprehends the cognition. It is for these reasons that we hold that the cognition is apprehended by Sense-perception obtained through the agency of the mind, while its validity is apprehended by means of Inference; for instance, when the man seeking for water has the cognition (or perception) of water, the exertion that he puts forth is either *fruitful* or not *fruitful*; of these the fruitful exertion is called '*samartha*' or 'fit,' 'capable'; and it is through the fruitfulness of the exertion that the validity of the cognition (exciting that exertion) is *inferred*; the inferential syllogism appearing in the following form:—'the cognition of water in question is valid,—because it gives rise to fruitful exertion,—that which is not valid never gives rise to fruitful exertion:—as for example, the invalid cognition'; this is based on the universal negative premiss ('that which is not valid never gives rise to fruitful exertion)'; the 'subject' of the syllogism is *that cognition of* *water which gives rise to fruitful exertion* ; and the '*probandum*' is the *validity* of that cognition; what is meant by the 'validity' (*prāmāṇya*) of the cognition in this case is the fact of its being in due consonance with its real object,—and not the character of being the instrument of right cognition ; as if it meant the latter, then the syllogism would become fallacious ; in view of Remembrance, which, while giving rise to fruitful exertion (and thus fulfilling the conditions of the *probans, is not* the instrument of right cognition, and thus fails in reference to the *probandum*). The *probans* of the syllogism is the 'character of giving rise to fruitful exertion.' The validity of the cognition, after it has become rightly effective (by giving rise to fruitful exertion), being thus ascertained by means of the above Inference, we are led to infer, on the strength of the analogy of this cognition of water, the validty also of similar cognitions of water, even before they have given rise to any exertion, and thereby proved themselves to be rightly effective,—this inference being based upon the fact of these latter cognitions being similar on all points to the previous cognition ; and this inference is based upon positive-negative premises. Thus then, we conclude that the validity of cognitions is apprehended by means other than those whereby the cognitions themselves are apprehended.

'All the four Instruments of Right Cognition Kes'ava has explained, ,for the comprehension of youthful learners in accordance with the Ṣāstras, indicating in brief the main arguments bearing upon the subject.'

SECTION II.

§ 2 *PRAMEYAS : OBJECTS OF COGNITION.*

The *Instruments* of Right Cognition have been described ; we now proceed to describe the *Objects* of cognition. On this point we have the aphorism (*Nyāya-sūtra*, I. 1. 9)—' (1) the Soul, (2) the Body, (3) the Sense-organs, (4) the Objects or Categories, (5) Apprehension, (6) the Mind, (7) Activity, (8) Defects, (9) Rebirth, (10) Resultant Experience, (11) Pain and (12) Release, —are the *objects of cognition*.'

(1) Of these the Soul is that which belongs to the genus 'Soul'—*i.e.*, that which is possessed of the generic character of the 'Soul.' This Soul is something distinct from the body, the Sense-organs and other things; it is different with each body, it is eternal and omnipresent. It is perceptible by the mind. When there is any diversity of opinion as to the Soul being perceptible by the mind, it may be inferred through the presence of such peculiar qualities as the Intellect and the like. The whole inferential process involved may be explained as follows:—Intellect and the rest must be regarded as *qualities*,—because, like colour, they are transient and perceptible by a single Sense-organ; and as a matter of fact, the Quality must subsist in some substance; now Intellect and the rest cannot be the qualities of material substances,—because they are perceptible by the mind,—and the qualities of material substances are never perceived by the mind, *e.g.*, colour and the rest; nor again could they be qualities of Space, Time or Mind,—because they are what have been called 'specific qualities,'—and Number and such other qualities of Space, Time and Mind are not 'specific qualities,' being, as they are *common* to all substances; that Intellect and the rest are 'specific qualities' is proved by the fact that while they are qualities, they are each perceived by a single sense-organ; like Colour, &c.; and for this reason they cannot be the qualities of Space, Time and Mind; for these reasons the substratum of Intellect, &c., must be a substance other than the aforesaid eight (the five material substances and Space, Time and Mind); and this ninth substance is none other than the Soul. This inferential process may be stated in the form of the following formal purely negative syllogism:—'Intellect, &c., must subsist in a substance other than the eight substances, Earth, &c.,—because while not subsisting in these, they are qualities,—that which does not subsist in a substance other than the eight substances is never found to be a quality that does not subsist in the eight substances,—*e.g.*, Colour and the rest;' or it may be stated in the form of the following mixed, or positive-negative, Syllogism:—'Intellect and the rest must subsist in a substance other than the eight substances, Earth and the rest,—because they are qualities, and do not subsist in these eight substances,—that which does not subsist in one thing subsists in things other than that thing,— *e.g.*, sound which does not subsist in Earth, Water, &c., subsists in *Ākāśa* which is a substance other than the Earth, &c.,—in the same

manner, Intellect and the rest subsist in a substance other than the eight substances, Earth and the rest.' It is in this manner that the Soul becomes established as the ninth substance, the substratum of the qualities of Intellect and the rest. And this Soul must be omnipresent, in as much as its effects (*i.e.*, the effects of the merit and demerit acquired by the Soul) are found to be present everywhere ; by 'omnipresence' we mean the largest dimension. Being omnipresent, the Soul must be eternal ; like the *Ākāśa*. It must be regarded as different in each body ; because we find that the experiences of pleasures, pain, &c., vary in different bodies.

(2) That ultimate composite which forms the receptacle of the Soul's experiences is the *Body*. By 'experience' we mean the perception or feeling of pleasure or pain ; and these are produced in the Soul only when the Soul is possessed of (characterised by) a certain accessory ; and this accessory being the receptacle of the experiences, is the Body. Or we may define the Body as the substratum of activity ; 'activity' consisting not in mere motion, but in action tending to the acquiring of the good or desirable and the abandoning of the evil or undesirable.

(3) That which is in contact with the body, is the instrument of cognition and is itself imperceptible by the senses,—is the *Sense-organ*. If the *Sense-organ* were defined only as that which is imperceptible by the senses,—this would include Time, &c. also, —hence we have added the qualification 'that which is the instrument of cognition.' Even with this qualification, the definition would be applicable to the contact of the Sense-organ with the perceived object ; hence we have added the further qualification that 'it is in contact with the body.' If we define it simply as that which is in contact with the body and is the instrument of cognition,—even such things as Light and the like would have to be regarded as 'Sense-organs'; hence we have added the qualification that it is imperceptible by the Sense-organs. The number of these Sense-organs is *six* :—The Olfactory, the Gustatory, the Ocular, the Tactile, the Auditory and the Mental. Of these, the Olfactory argan is that which brings about the apprehension of smell ; and is located in the tip of the nose ; this organ is of the Earth, because it is odorous, like the jar ; that it is odorous is proved by the fact that (it apprehends odour ; because it is a well-recognised fact that) from among the five qualities—Colour, Taste, Odour, Touch

and Sound,—that quality which the Sense-organ apprehends belongs to that Sense-organ; as we find in the case of the Ocular organ, the eye, which, apprehending colour, is itself coloured. The Gustatory organ is that which brings about the apprehension of taste; and is (located at the tip of the tongue; it is of) the Water, because it has taste; that it has taste is proved by the fact that from among colour and the rest it manifests taste only, like the saliva. The Ocular organ is that which brings about the apprehension of colour; it is located within the black pupil of the eye; it is of the Light, because from among colour and the rest, it manifests colour only, like the lamp. The Tactile organ is that which brings about the apprehension of touch; it exists all over the body; it is of the Air, because from among colour and the rest, it manifests touch only, like the wind proceeding from the fan, which manifests, or renders perceptible, the cool touch of the water attaching to the body. The Auditory organ is that which brings about the apprehension of sound; it is nothing else but *Ākāśa* as limited by the tympanum; that it is *Ākāśa* is proved by the fact that it is possessed of the quality of sound; and that sound is a quality of this organ is proved by the fact that it apprehends sound; it being a well-recognised law that from among colour and the rest, that quality which is manifested by a certain organ belongs to that organ; as we find in the case of the Ocular organ which apprehends colour, and is itself coloured; hence being the apprehender of sound, the Auditory organ, must have sound for its quality.

The Mental organ is that which brings about the apprehension of pleasure, &c.; it is atomic and located within the heart.

" What is the proof for the existence of these Sense-organs ?"

Inference alone affords the requisite proof,—*viz.*, ' The apprehension of Colour, &c., must be brought about by some instrument,—because they are actions,—like the action of cutting.' [And it is these ' instruments ' that constitute the Sense-organs.']

(4) The six categories constitute the ' objects.' The six categories are—Substance, Quality, Action, Community, Specific Individuality and Inherence. Though the ' Instruments of Right Cognition ' and the other ' *prameyas* ' are all included under these six,

yet they have been enunciated separately for a definite purpose. Of these six categories, the Substance is that which is the constituent or material cause of things,—or that which is the substratum of qualities. The substances are nine in number: Earth, Water, Light, Air, *Ākāśa*, Time, Space, Soul and Mind.

Of these, Earth is that which possesses the generic character of 'Earth'; consisting of a peculiar conglomeration of particles, which constitute its *hardness, softness*, &c. It exists in the form of the Olfactory organ, the bodies (of animals), lump of clay, stone, trees and so forth; it is endowed with the qualities of colour, taste, odour, touch, number, dimension, separateness, conjunction, disjunction, priority, posteriority, gravity, fluidity and momentum. It is of two kinds—eternal and transitory; Earth in the form of atoms is eternal; and that in the form of the various composite products is transitory. Of both these kinds of earth, the colour, taste, odo ur and touch are evanescent; being brought about by the application of heat; as a matter of fact, when heat is applied to earthy substances, their previous colour, &c., are destroyed, and fresh ones are produced.

Water is that which is possessed of the generic character of 'water'; existing in the forms of the Gustatory organ, the bodies of aqueous beings, rivers, oceans, snow, hail and the like; it is endowed with all the qualities belonging to Earth, with the exception of odour, and with the addition of viscidity. Water also is eternal and transitory; the colour, &c., of the eternal watery substances are eternal; and those in the transitory ones are evanescent.

Light is that which is possessed of the generic character of 'light' existing in the forms of the eye, the bodies (of fiery beings), the Sun, gold, fire, lightning and so forth; it is possessed of the qualities of colour, touch, number, dimension, separateness, conjunction, disjunction, nearness, remoteness, fluidity and momentum; the eternality and non-eternality of this are as before (in the case of Earth, etc.). It is of four kinds—(I) havnig colour and touch both manifested; (2) having both colour and touch unmanifested; (3) having colour unmanifested and touch manifested; and (4) having its colour manifested and touch unmanifested. The light that has colour and touch manifested is in the form of the light of the Sun, &c., and also in masses of fire; the Gold is light with its colour and touch manifested but suppressed: if its colour were not manifested it could not be visible; and if its touch were not manifested, it could not be perceived by touch; the suppression of its colour and touch is done by the homogeneous colour and touch belonging to the earth-particles (mixed up in the gold). The light that has its colour and touch unmanifested is in the form of the Ocular organ. That having its colour unmanifested but touch manifested is in the form of the light latent in heated water. Lastly, that having its colour manifested and touch unmanifested is in the form of the circle of light emanating from the lamp.

Air is that which is possessed of the general character of 'Air'; it exists in the form of the Tactile organ, the air breathed in, and so forth; it is endowed with the qualities of touch, number, dimension, separateness, conjunction, disjunction, nearness, remoteness and velocity. It is inferred from the feelings of touch, &c. For instance, when the wind blows, we feel a touch which is neither hot nor cold, this touch being a quality which cannot subsist without a substance; and hence the touch, when felt leads to the inference of the substance to which that touch belongs; and this substance is none other than Air; because no earth is found to be present; and apart from Air and Earth the touch, which is neither hot nor cold, cannot subsist. Air also is of two kinds—eternal and non-eternal; the eternal air being in the form of atoms, and the non-eternal in the form of the various composite products.

We now proceed to describe the processes of the production and destruction of the composite substances or products of the four substances described above. When two atoms are active, they combine; and from this combination is the Diad formed; of this Diad, the two atoms form the constituent cause; and the conjunction of the atoms forms the non-material cause; and such agencies as the 'Unseen Agency' (or Fate) and the life form the efficient or Instrumental cause. When there is an activity among three diads, and they combine in consequence, there appears the Triad; of which the Diads form the constituent cause, and the other two as above. Similarly with four Triads the Quartette is formed; with four Quartettes another more gross substance, and so on and on to the grossest substance; upto the Great Earth, the Great Water, the Great Light, and the Great Air. The colour and other qualities in the products are produced out of the qualities of their respective constituent particles, in virtue of the law that the qualities of the cause produce the qualities of the product. After the product, the jar for instance endowed with colour and such other properties has been brought into existence, at some time or the other, there appears an activity among the component parts of the jar,—this activity being due either to a push or to a stroke ; this activity brings about a disjunction among the particles ; which disjunction brings about the destruction of the conjunction that keeps the composite substance intact and is its non-material cause ; and it is thus that the composite jar comes to be destroyed. This shows how an object is destroyed on the destruction of that non-material cause which keeps the object. In some cases the object is destroyed by the destruction of its material cause ; as for instance, when the time for the dissolution of the Earth, &c., arrives, there appears in the mind of God the desire to dissolve the world ; whereupon, there appears an activity among the atoms composing the Diad ; this activity brings about a disjunction or disruption which destroys this conjunction, from which results the destruction of the Diad ; and the Diad being destroyed, there follows the destruction of the Triad, due to the destruction of the Diad which forms its substratum ; and so on, it goes till ultimately the entire Earth is destroyed. Another instance of the destruction of an object by the destruction of its material cause we have in the destruction of the cloth brought about by the destruction of its component yarns. The destruction of the colour and other qualities of the products is due to the destruction of the products themselves, which form the substratum of those qualities. In some cases however, while the substratum, the object, remains intact, one quality may be destroyed by the appearance of other contrary qualities ; *e.g.*, by baking, the dark colour of the jar is destroyed (by appearance of the red colour).

" What is the proof for the existence of the Atom ?'

We proceed to explain the evidence that we have for the existence of the Atom. In the rays of the sun seen through the network of the spider's web, we perceive extremely fine specks of dust ; this grain of dust, we argue, must be a product composed of finer particles,—because it is a product,—like the jar ;—those finer particles again must be regarded as products,—because of the la that the component particles of a gross composite must themselves be products ; carrying this same reasoning a few steps downwards, we come ultimately to the particles in the form of Diads ; this Diad in its turn, we argue, must be the product of still finer particles,—because it is a product,—like the jar ; and it is this particle composing the Diad that is called the 'Atom'; and this is not a composite product.

" In view of the universal character of the law that the component of a composite product must itself be a composite product, how can the Atom which is the competent particle of the composite Diad be regarded as *not* a composite product ?"

We accept the Atom as indivisible,—*i.e.*, not a composite product,—because otherwise (if we did not stop at some point in the series) we would be landed on the absurdity of having to postulate an infinite series of products ; and the inevitable result of this would be that, all things being equally composed of infinite component particles, the mountain Meru and the grain of rapeseed would come to be regarded as of equal dimension. For this reason the Atom must be regarded as indivisible,— and not a composite product. The Diad is composed of *two* atoms ; because a single atom cannot be productive ; and there is nothing to prove that the Diad contains three or more atoms. The Triad is composed of *three* diads ; because a single diad cannot be productive ; and if it were composed of only two Diads, then it could not become endowed with that *larger or grosser dimension* which is the distinctive feature of all products (as compared with their component particles) ; because this grosser dimension of the product is due either to the gross dimension of the component particle, or to the numerousness of the component particles ; and inasmuch as no gross dimension belongs to the Diad (which is the component particle of the Triad, which is subtle in its dimension), the gross dimension of Triad must be attributed to the latter cause,—*i.e.*, to the numerousness of the component Diads ; which proves that the number of Diads in a Triad must be three or more ; and as there is nothing to show that the number is more than three, we conclude that the gross dimension of the Triad must be due to the presence of *three* diads.

The *Ākāśa* is that which is the substratum of the distinctive quality of Sound ; and it is endowed with the qualities of sound, number, dimension, separateness, conjunction and disjunction. It is one only, all-pervading and eternal ; its presence is indicated b Sound.

"In what way do you prove the fact that the presence of *Ākāśa* is indicated by sound ?"

We prove it by means of the reasoning *per* '*pariśeṣa*'; the subsistence of a certain quality in a number of things being suspected, when the impossibility of such subsistence in some of those things is proved, the notion that we have of the quality subsisting in the remaining things is what is called '*pariśeṣa*' ; thus, in the case in question, we argue that Sound is a specific quality, because while possessing a generic character, it is perceptible by us by means of a single sense-organ ; *e.g.*, colour and the rest ;—being a quality it must subsist in a substance ;—it cannot subsist in Earth, Water, Light, Air, or Soul,—because it is perceptible by the Auditory organ ;—those qualities that subsist in these latter substances are not perceptible by the Auditory organ,—as we find in the case of the qualities of colour and the like ;—and sound is perceived by the auditory organ [therefore it cannot subist in Earth and the rest] ;—nor can sound be the quality of Space, Time and Mind,—because it is a *specific quality* [and none of those three are possessed of any specific qualities]; for these reasons the substance in which sound subsists as the quality must be one that is distinct from these eight ; and this can be no other than *Ākāśa*. The *Ākāśa* is one only ; there is no proof for its diversity ; and all that is needed is explicable by a single *Ākāśa*. Because *Ākāśa* is one only, there subsists in it no such generality as '*Ākāśatva*'; as a diversity of individuals is a necessary element in all generalities, all *generality* subsisting in more than one individual. The *Ākāśa* is *all-pervading*,—*i.e.*, possessed of the largest dimension ; this being shown by the fact that its effect is found everywhere. And finally, being all-pervading, it is *Eternal*.

Time also is inferred from the notions of nearness and remoteness which are contrary to those pertaining to Space ;*

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* The nearness and remoteness due to Space is not brought about by the movements of the sun ; while those pertaining to Time are brought about by the Sun's movements.

it is endowed with the qualities of number, dimensions, separateness, conjunction and disjunction ; it is one and all-pervading.

" In what way is Time inferred from the nearness and remoteness contrary to that pertaining to Space ?"

When an old man is near us,—though on account of his proximity to us he is capable of being spoken of as *near*, yet the notion that he actually gives rise to is that of *remoteness* from us ; conversely, when a young man is at a distance from us,—even though this fact of his being at a distance renders him liable to be spoken of as *remote*, yet the notion that he actually gives rise to is that of *nearness*. [What happens in these cases is that the man who is near us *in space* is *remote* in point of time, and *vice versa*]. Now, these notions of *nearness* and *remoteness*, contrary to those pertaining to Space, being effects, must have a cause ; this cause cannot be Space or any other substance ; and hence what is the cause of this effect is Time, whose existence is inferred from the said effects.

Though Time is in reality one only, yet through certain conditions in the shape of *present*, *past* and *future* actions, it comes to bear the names of ' present ' ' past ' and ' future '; exactly in the same manner as one and the same man, through certain conditions in the shape of the actions of cooking, reading and the like comes to be known as a ' cook ' ' reader ' and the like. The eternality and all-pervadingness of Time are to be explained in the same manner as before (in the case of *Ākāśa*).

Space, whose existence is inferred from those notions of nearness and remoteness that are contrary to similar notions pertaining to Time, is one, eternal and all-pervading ; it is endowed with the qualities of number, dimension, separateness, conjunction and disjunction. It is inferred from such notions as those of ' East ' and the like as these notions can have no other cause save Space ; inasmuch as in every other way the thing remains the same, whether it be located in the east or in the west. Though Space is one only, yet it comes to be named ' East,' ' West ' and the rest, through certain circumstamces in the form of the contact of the Sun with various places.

The Soul is that which possesses the generic character of 'Soul'; it is different in each body, inasmuch as pleasure and pain, &c., in each body are entirely distinct from those in the other. The qualities that belong to it are, the five beginning with Number, as also the nine *specific qualities,* beginning with knowledge or intellection. This also is eternal and all-pervading as the substances before mentioned.

The Mind is that which is possessed of the generic character of 'mind'; it is atomic, is in contact with the Soul and is the internal organ, being the organ through which pleasure, pain, etc., are experienced ; it is eternal ; endowed with the eight qualities beginning with Number. It is through contact of this mind that the external sense-organs apprehend their respective objects ; and it is on this account that the mind is regarded as the organ leading to all perception. The mind itself, however, is not perceptible ; it can be only inferred ; the inference being expressed in the following terms :—The apprehensions of pleasure, &c., must be due to an organ other than the Ocular and the rest,—because those apprehensions are found to appear also where the Ocular and other organs are not present,—and it is a well recognised law that when a thing is produced in the absence of another thing, it must have for its cause something other than this latter thing ; as we find in the case of the action of cooking, which, being produced in the absence of the axe, has for its cause, fire and such other things, which are different from the axe ;—and this other organ (that brings about the apprehension of pleasure, &c,.) is the mind ; and it is an organ totally different from the Ocular and other organs ; and it is atomic.

The Substances have been described ; we proceed to describe the Qualities. Quality is defined as that which is endowed with generic character, is the non-material cause of things, and is not of the nature of motion ; and it always subsists in substances. The qualities are twenty-four in number :—Colour, Taste, Odour, Touch, Number, Dimension, Separateness, Conjunction, Disjunction, Nearness, Remoteness, Gravity, Fluidity, Viscidity, Sound, Knowledge, Pleasure, Pain, Desire, Aversion, Effort, Merit, Demerit and Faculty.

Of these qualities, Colour is the *specific* quality, perceptible by the Ocular organ only ; it subsists in Earth, Water and Light ; it is of various kinds, white and the rest. In earthy substances, Colour is produced by the application of heat ; and (hence) it is in these substances alone that colour is transient ; in the atoms of Water and Light it is eternal ; but in the composite aqueous and luminous products it is transient. The colour in luminous substances is bright-white, and is not due to the application of heat ; and in aqueous substances also it is of the same kind, except that in these it is not bright.

Taste is the specific quality perceptible by the Gustatory organ ; it subsists in Earth and Water ; in the earthy substances it is produced by the application of heat, and is of six kinds—sweet, acid, saltish, pungent, astringent and bitter ; in aqueous substances, it is sweet only, not produced by the application of heat, and is both eternal and transient ; eternal in the water-atoms, and transient in the composite aqueous products.

Odour is the specific quality perceived by the Olfactory organ ; it subsists in Earth alone ; and is always transient. It is of two kinds—good and bad. The odour that is generally found in water and other substances is due to the presence of earth-particles mixed up with the water, in which earth-particles subsists the odour that is perceived.

Touch is the specific quality perceived by the Tactile organ ; it subsists in Earth, Water, Light and Air. It is of three kinds—cool hot and neither hot nor cool ; it is *cool* in Water, *hot* in Light ; and *neither hot nor cool* in Earth and Air. It is in the Earth alone that it is transient ; it is eternal in the atoms of Water, Light and Air ; but transcient in the composite products of these latter. The above four qualities—Colour, Taste, Odour and Touch—become perceptible only when they are *manifested*, and that also in such substances as are endowed with sufficiently large dimensions.

Number is a *general* (or common) quality (as opposed to the *specific* qualities), and forms the basis of the ordinary notions of 'unity,' 'duality,' &c. It extends from *one* to the *parārdha* (which is the highest conceivable number). It is eternal in eternal substances, and transient in transient substances ; in the latter case, it is produced by *unities* in the object in which it inheres. *Duality* is always transient ; being produced as it is, by the distinctive unitary conceptions in the form of 'this is one unit' and 'that is another,' that we have with reference to two objects ; for 'duality' thus there are two constituent causes, in the shape of the two objects ; while its non-constituent cause are the two unities, while the distinctive unitary conception is the efficient cause. Duality is destroyed by the destruction of the distinctive unitary conceptions. As is the case with the notion of 'two,' so it is with those of 'three' and the other numbers.

Dimension is the specific cause of all notions of measurement or size. It is of four kinds—small, large, long and short. The dimension of the product is due to number, dimension and aggregation ; for instance, the dimension of the Diad, being produced by the distinctive unitary conceptions that God has with reference to the two atoms composing (the Diad, is due to the number ; that is to say, it is produced) by the number of the component atoms ; the Dimension of the Triad is produced by the *multiplicity* of numbers inhering in the Diads composing it ; but the dimension of all products, from the Quartette downwards, is produced by the dimension of their component particles (their constituent causes) ; and lastly, the dimension of the bale of cotton is due to the aggregation, or loose conglomeration, of its component layers (which are its constituent cause). The *samll* dimension of the atom, as well as the *large* dimension of *Ākāśa*, is eternal.

Separateness is the peculiar cause of the notion of one thing being separate from another. It is of two kinds—(1) single separateness and (2) double, triple separateness, &c. ; the former when subisting in eternal substance, is eternal ; and it is transient when subsisting in transient substances ; and the double separateness, &c., are always transient.

Conjunction is the quality that serves as the peculiar cause of the notion of one object being in contact with another. It subsists in two substances, and never pervades over its entire substrates. It is of three kinds—(1) due to the action of any one of its two substrates ; (2) due to the action of both its substrates ; and (3) due to another conjunction. To the first class belongs the conjunction of the moving kite with the unmoving pillar,—of this conjunction the action (moving) of the kite is the non-constituent cause ;—to the second class belongs the impact or collision of two wrestlers ;—and to the third class belongs the contact between the effect and what is not an effect,—this contact being brought about by the conjunction of what is the cause with what is not the cause ; as for example, the conjunction between the body and the tree brought about by the conjunction between the hand and the tree [where the hand is the constituent cause of the body, while the tree is not its own cause].

Disjunction also is the basis of the notion of one thing being disjoined from another. This also is of three kinds—(1) due to the action of one of the two members ; (2) due to the action of both members ; and (3) due to another disjunction. To the first class belongs the disjunction of the kite from the mountain on which it was resting,—this disjunction being due to the flying away of the bird ; to the second class belongs the disjunction or separation of two wrestlers ; and to the third class belongs the disjunction of the body from the tree following upon the disjunction of the hand from the tree.

Remoteness and Nearness (or Priority and Posteriority) are the peculiar causes of the notion of 'remote' and 'near.' They are of two kinds, pertaining to space and pertaining to time. We proceed first to excplain the appearance of those pertaining to space :—When two objects are placed on the same side of the observer, the quality of *Nearness* is produced in the object which is closer to him by the conjunction of the object with the particular point in space that it occupies,—this conjunction being aided in this by the notion in the mind of the man of that object being closer to him than the other one ; and when a similar conjunction of the other object is aided by the notion of the other object being further removed from the man, it produces the quality of *Remoteness* in that object which is further removed. The *proximity* of the object to the observer consists in the comparatively smaller number of contacts with space-points between that object and the body of the man ; and conversely the *distance* of the other object consists in the comparatively larger number of such contacts.

We next describe the appearance of the qualities of Nearness and Remoteness as pertaining to Time. When two persons, one of whom is younger than the other, are located in uncertain places the quality of *Nearness* is produced in the younger person, by the conjunction of the body of that person with the particular point in time, — this conjunction being aided by the notion that the body has had contact with fewer time-points; and similarly the quality of *Remoteness* is produced in the older person, by a conjunction of that person, when aided by the notion of his body having had contact with a larger number of time-points.

Gravity is the non-constituent cause of the first step in the falling of a substance: it subsists in Earth and Water only. In regard to this quality it has been declared that the falling of a substance is due to its gravity, when there is nothing in the shape of conjunction, velocity or effort (to prevent such falling).

Fluidity is the non-constituent cause of the first step in the process of flowing; it subsists in Earth, Light and Water. In such earthy substances as Butter, &c., and in such luminous substances as Gold and the rest,—the Fluidity is *caused*, being brought about by the application of heat; in water on the other hand, it is *natural*.

Viscidity is smoothness; it subsists in Water only; it is brought about in the product by reason of a like quality in the cause or component particles of that product: and like gravity, &c. it is coeval with the substance in which it subsists.

Sound is the quality apprehended by the auditory organ: it is the specific quality belonging to Ā*kāśa*.

"In what manner can sound be said to be apprehended by the Auditory Organ, when, as a matter of fact, it is produced at the place occupied by the drum (for instance), while the organ is at the place occupied by the man?"

True; but the sound produced at the place of the drum produces another sound in close proximity to it,—either in the form of water-ripples, where one ripple sets up another in close proximity to itself, or in the manner of the filaments of the Kadamba flower, where the central carpel shoots off the filaments in all directions,—and the ripples being thus set up one after the other, till one sound-ripple happens to be produced in the regions of the Auditory Organ; and it is this last ripple and not either those in the middle or at the other extremity, that becomes apprehended by the Organ. In the same manner, when a piece of bamboo is cleft in twain, the sound produced at the point of the cleaving sets up sound-ripples till the last ripple produced in the regions of the Auditory Organ becomes apprehended by that organ; then as regards the ordinary belief 'I have heard the sound *of the drum*' (in the sense of the sound being produced in the regions of the drum),—this must be regarded as a misconception.

In the production of the sound of the drum, the non-constituent cause is the contact of the drum and the stick with which it is struck; similarly in the productin of the *chut-chut* sound accompanying the cleaving of the bamboo, the non-constituent cause is the disjunction between the cleft parts of the bamboo and the *Ākāśa*; and the efficient cause is the disjunction between the two cleft pieces of the bamboo. Thus then we find that, at the first step, sound is produced either by conjunction or by disjunction; while at the intermediate and at the last step, this has sound alone for its non-constituent cause, and favourable air-currents for its efficient cause; this is what has been declared in the *Vaiśeṣika-Sūtra* (2-2-31)—'Sound is produced by conjunction, by disjunction and by souud.' The *constituent cause* of all sounds, however, is *Ākāśa* itself. Sound, like action and knowledge, continues to exist for three moments of time. The first and the intermediate sounds are destroyed by the sound-wave next to itself; while with regard to the last and the last but one it would seem that they are destroyed by each other, like the two-wrestlers of the story, named 'Sunda' and 'Upasunda';—but this would be scarcely right; because by hypothesis, the last but one should continue to exist for three moments; and as such it would exist only till the second moment of the last sound; and so not existing at the third moment of the latter, it could not bring about this destruction; for this reason it has been held that the last sound is destroyed by the destruction of the last but one sound.

That sound is destructible is proved by inference: the inference being stated in the following form:—Sound is transient,—because while belonging to a generality (or genus), it is apprehended by our external sense-organ,—like the jar'; herein the *probandum*, or what is proved, is the fact of sound being a transient: and what is meant by a thing being *transient* is that it has a form that is liable to destruction; it does not mean that it has a *being or existence* that is liable to destruction; because if it meant this latter, then there could be no transient character in Prior Negation, which has no *being* at all (and is yet regarded as *transient*); and the *probans* that proves the conlcusion is the fact of sound belonging to a generality and being apprehended by an external sense-organ: if we had said simply 'apprehended by the sense-organ,' then the reasoning would apply to the soul also (which is apprehended by the organ of the mind); hence we have said 'apprehended by our *external* sense-organ;' similarly if we had said simply 'apprehended by external sense-organ,' then, it would apply to the *atom* and such other ordinarily imperceptible things that are 'apprehended by the external sense-organs' of the *Yogin*; hence we have said 'apprehended by *our* external sense-organs.'

"What proof is there for the existence of such persons as the *Yogin*?"

The proof, we reply, lies in the following reasoning:—The atoms must be perceptible by some one, because they are knowable like the jar.

Even with all these qulifications, the above reasoning (in proof of the destructibility of sound) would apply to Generalities; hence with a view to exclude these, we have added the qualification 'while belonging to a generality'; and it is well known that the three categories—Generality, Specific Individuality and Inherence—are entirely devoid of generality.

Knowledge consists in the manifestation of objects. It is eternal as well as transient; the knowledge of God is eternal; that of all others is transient.

Pleasure is gartification, and is recognised by all souls as something desirable.

Pain is suffering; and is recognised by all souls as something undesirable.

Desire is attachment,

Aversion is anger or soreness,

Effort is energy or exertion.

The six qualities—Knowledge, Pleasure, Pain, Desire, Aversion and Effort—are perceptible by the mind.

Merit and Demerit are the specific causes of pleasure and pain respectively. Even though imperceptible, these two are known through Scriptures, and also by means of Inference, the Inference being in this form—The body and other things belonging to Devadatta are the effects of some *specific quality* belonging to Devadatta, because while being effects they are the means by which Devadatta's experiences are brought about, like any other object obtained by the man's efforts. And the specific quality by which these, body and other things, are brought about is known under the names of '*dharma*' and '*adharma*' or 'merit and demerit'; because such other specific qualities as effort and the rest are not capable of 'bringing about' such products as the Body and the like.

Faculty is of three kinds—Velocity, Impression and Elasticity. Of these, Velocity subsists in Earth, Water, Light and Air; and it is the cause of action (motion). The Faculty in the form of Impression subsists in the soul only: and being the product of cognition, becomes the cause of remembrance; it is only when the Impression is aroused that it becomes the cause of remembrance; and the arousing or excitement of the Impression consists in its obtaining the necessary auxilliary; the auxilliaries of Impression appear in the form of the perception of similar things and so forth. This is what has been thus declared—'What arouse the cause of remembrance are similarity, unseen agency and constant thought.' Elasticity subsists only in certain tangible substances; it is that quality which makes the bow and such other things revert to their original shape after their shape has been temporarily altered.

All the qualities from Knowledge down to Demerit, along with Impresssion, constitute the *specific* qualities of the soul.

We have described the Qualities, and proceed to describe Actions. Action consists of motion; like Qualities it subsists in Substances only; it co-exists with that limited dimension of substances which has been called 'corporeality'; and through disjunction it becomes the cause of the destruction of the conjuuction of its substrate with one point in space, and also of the appearance of its conjunction with another point. This is of five kinds—*throwing upward*, *throwing downward*, *contracting*, *expanding* and *going*; Revolving and such other actions are all included in *going*.

Sāmānya or Generality is the basis of all comprehensive notions; it subsists in Substances, Qualities and Actions; it is eternal, one only, but pervading over many things. This is of two kinds— *higher* and *lower*. The highest or *summum genus* is 'Being', which includes many things; it is a pure generality inasmuch as it forms the basis of comprehensive notion only. The *lower* generalities,—in the shape of 'substance' and the rest, are so called, because they include only a few things; and these are *generalities* as well as *individualities*, inasmuch as they form the basis of *comprehensive* as well as *exclusive* notions.

On this subject some people hold that there is no generality or genus apart from individuals. But against this view we urge the following considerations:—If there were no genus, what would be the basis for that comprehensive notion, of *oneness* that we have with regard to many different individual substances, in the absence of some such entity as pervades over all these? It is that which forms the basis of this comprehensive notion what we call 'Generality.'

"The comprehensive notion of diverse individuals may be explained on the basis of the negation of things other than those cognised.

[*i. e.* all individual cows are spoken of as *cow,* on the basis of all of them equally agreeing in being *the negation of the non-cow, i.e.,* the negation of all animals—the horse and the rest—other than the cow ; and thus the one comprehensive notion that we have of all cows would be based upon this *negation of the non-cow,* and not on any generality or genus.]"

This is not right, we reply ; because the comprehensive notion that we have is in the positive form, and not in the negative (as it would be if it were based upon negation.)

The Specific Individuality is eternal, and subsists in eternal substances only ; it always forms the basis of exclusive notions only. The eternal substances (in which these subsist) are *Ākāśa,* Time, Space, Soul and Mind, as also the atoms of Earth, Water, Light and Air.

Inherence is the relation subsisting between things that are never found apart from one another,—those, that is, that are usually inseparable. This has already been explained.

Against this the Bauddha raises an objection:—"It has been asserted that the whole and its parts being inseparable, the relation subsisting between them is 'Inherence.' This however is not right, because the *whole* has no existence apart from the parts—*i.e.,* the *whole* is nothing different from the parts; for instance, the jar is nothing more than the component atoms themselves combining in that particular form. [And the jar being the same as the component atoms, we cannot speak of any relation between them ; as all relation subsists between *two* different things.]."

To the above, we offer the following reply:—That the jar is *one* and *gross* is a judgment that is obtained directly by Sense-perception ; and this judgment cannot apply to the component atoms, which are *many,* and *not gross,* and not perceptible by the senses (which latter circumstance makes them totally incapable of forming objects of any judgment based directly on sense-perception). It might be argued that the aforesaid judgment (in regard to the jar) is wrong. But there is no evidence for regarding it as such; there being no sublation of it by means of any subsequent judgment.

We have described the six categories, Substance and the rest; all these appear as objects of positive conceptions; and as such are all in the form of *entities*, We now proceed to describe the seventh category of N*egation*. which, being the object of negative conceptions only, is of the form of non-entity.

In brief, Negation is of two kinds—'Relative' or Ordinary Negation, and Mutual Negation. Ordinary Negation again is of three kinds—Prior Negation, Destructive Negation and Absolute Negation. Before the effect is produced, there is negation of that effect in its cause; it is this negation of the effect in its efficient cause that is called 'Prior Negation'; *e.g.* the Negation of the cloth in the yarns; this negation is beginningless, not being brought into exsitence by anything; it has, however, an end; as the very production of the effect itself constitues the end of the 'prior negation' of that effect. When the effect has been produced, it is destroyed after a time, being reduced to the form of its original cause; and this destruction of the effect is called its 'destructive negation'; *e. g*, when the jar has been broken, there is negation of the jar in the number of pieces into which it has been reduced. This negation has a beginning, being (in the case of the jar) brought about by the stroke of the stick. Though having a beginning, it has no end; as the effect that has bean once destroyed is never brought into existence again [and it is only by its reappearance that its negation could be destrcyed.] When an object has had no existence in the past, nor has it an existence in the present, nor is there any likelihhood of its coming into existence in the future, this negation of the object is called 'absolute'; *e.g.*, the negation of colour in Air.

Mutual negation is that which has for its counter-entity (*i. e.*, which denies) the identity of things; *e. g*, in the conceptoin 'the jar is not the cloth,' we have the mutual negation of the jar and the cloth.

We have described the 'objects' (of cognition). We proceed to describe Cognition; and with regard to the nature of cognitions, the Idealists, the Bauddha and the Vedāntin, raise an objection]—"Objects have no existence apart from cognitions (according to the Bauddha), or from Brahman (according to the Vedāntin)." This however is not right; bacause that *objects* exist is proved by sense-perception and other forms of valid cognition; so their existence cannot be denied.

(5) Buddhi or Knowledge is that which is spoken of by such synonymous words as "*upalabdhi*" (apprehension), '*jñāna*' (cognition), '*pratyaya*' (cognizance), and so forth; or we may define it as consisting in *the manifestation of things.* In brief, it is of two kinds—Direct Apprehension and Remembrance. Direct Apprehension again is of two kinds—true and false; the *true* apprehension is that which is in consonance with the real character of the thing apprehended; and it is brought about by the instruments of right Cognition, Sense-perception and the rest; for instance, by means of the undiseased eye we have the apprehension of the jar and such other things; by means of the smoke as the indicative mark (*probans*) we have the apprehenrion of fire; by the perception of the similarity of the cow we have the apprehension of the fact of a particular animal bearing the name of *gavaya*; and by means of such sentences as "one desiring heaven should perform the Jyotiṣṭoma sacrifice", we get at the apprehension of the fact. that the Jyotiṣṭoma sacrifice is the means of attaining heaven The *false* apprehension is that which is not in consonance with the real character of the thing cognised. and is obtained by means of invalid instruments of knowledge. It is of three kinds-*Doubt, Guess* and *Misapprehension.* Doubt and Guess will be described later on. Misapprehension consists in the knowing of a thing as what it is not *i.e.,* an Error; *e.g,* When the piece of shell before the eye, which is not silver, is apprehended as silver.

Remembrance also is of two kinds according as it is, or is not, in consonance with the real character of the thing remembered; both these kinds of remembrance appear during waking; in dreams all the cognition that there is, is of the nature of such remembrance as is not in consonance with the real thing. That it is so is proved by the fact that while in reality the thing remembered during dreams should be known as *that* (being not before the eyes) it is actually known as *'this.'* [thereby being the Cognition of a thing as what it is not]'

All Cognitions are formless ; the object cognised cannot be regarded as imposing its own form on the Cognition ; because the theory of Cognition being with form has been rejected. It is for this same reason that we do not infer the presence of objects from that of Cognitions : specially as the existence of objects—jar and the like—is proved by Sense-perception itself. Every Cognition is, however, indicated or defined by its object, as it is only when related to its object that the Cognition becomes apprehended by the mind ; as the judgment arising from every apprehension is in the form 'I have the cognition *of the jar,*' and not merely in the form 'I have a cognition.'

(6) The mind is the internal organ ; and has already been described (along with the Sense-organs.)

(7) Activity, partaking of merit and Demerit, consists in such actions as sacrificing and the like; this forms the basis of all that goes on in the world.

(8) *Defects* consist of Attachment, Aversion and Stupefaction. Attachment consists in Desire ; Aversion in Anger ; and Stupefaction in wrong knowledge or misapprehension.

(9) *Re-birth* or Re-incarnation consists in the soul's abandonment of one body and obtaining of another.

(10) *Resultant Experience* consists in the direct cognizance of pleasure or pain.

(11) *Pain* is trouble ; and this has already been described.

(12) *Release* is final emancipation ; this consists in the absolute cessation of the twenty-one forms of pain. The twenty-one forms of pain, including the important as wel as the unimportant ones, are—(1) the body, (2-7) the six sense organs, (8-13) the six objects of the six organs, (14—19) the six cognitions obtained through the organs, (20) pleasure, and (21) pain. Pleasure is regarded as 'pain' because of its being mixed up with pain ; and pleasure (accompaneied by pain)

is called 'pain' in the same manner as honey mixed with poison is called 'poison.'

"In what manner does this Release come about?"

When the man seeking Release has duly learnt from the Scriptures the real nature of all things, he notices many deficiencies in the objects of experience, whereby he loses his attachment or desire for these; after this he gives himself up to meditation; on the due perfection of which he comes to perceive the real character of the soul; and being freed from all defctes, he continues to perform only the acts laid down as *necessary;* and thus he does not acquire any further merit or demerit; as for his past merit and demerit, he knows them all by means of his Yogic powers; and knowing them, he brings them together and passes through the experiences resulting from them; by this process all his past Karmic residuum becomes exhausted; and so when his present body falls off, there is no new body to be taken up by him; which makes it impossible for him to come into contact with the twenty-one forms of pain beginning with the body; this being due to the absence of any cause for this (in the shape of past merit and demerit); and it is this cessation of the twenty-one forms of pain that constitutes what is called *Emancipation or Release.*

Section (3).

ON DOUBT.

When with reference to one and the same object there arise ideas of two mutually contradictory things, it is what is called 'Doubt. It is of three kinds—(1) arising from the non-perception of the difference between two things, and the perception of only their similarities; (2) arising from the differenee of opinions and (3) arising from the perception of a property that is peculiar to the thing concerned. As an instance of Doubt arising from the perception of similarities, and non-perception of differencas, we have the Doubt as to the object seen being 'a man or a post;' in this case, with reference to the object seen when the observer fails to perceive either the presence of crooked crevices which would lead to its being definitely recognised as the *post*—or the presence of head, hand,

and the rest, which would indicate it definitely to be a *man*,—and he perceives only the *tallness*, and such other properties common to the post and the man,—he has the doubt in in the form—'is this a post or a man ?' (2) The second kind of Doubt is that which is due to there being difference of opinion, and the distinctive features not being perceived; *e.g.* the Doubt as to words being eternal or non-eternal. Some people hold that words are eternal, while others hold that they are non-eternal; and the impartial man who becomes apprised of this difference of opinion, and does not himself notice any features in words that would point definitely one way or the other —has the doubt,—' is word eternal or non-eternal ?' (3) The third form of Doubt is that which is due to the perception of a property that is peculiar to the thing in question only; *e.g.* when one perceives the odour of earth,—which is a property peculiar to Earth only, and which does not indicate either eternality or non-eternality,—and he does not notice any other property either one way or the other,— there arises a doubt in his mind as to the eternality or non-eternality of Earth; the doubt being in the form—'Is the Earth eternal, because possessed of the quality of odour which is not present in non-eternal substances ? or is it non-eternal, because possessed of the quality of odour which is not present in any eternal subtance ?

Section (4).

ON MOTIVE

Motive is that, by which urged, man has recourse to activity; and it consists in the seeking of pleasure and avoidance of pain; as it is for the sake of these two ends that all men act.

Section (5).

ON CORROBORATIVE INSTANCE.

The Corroborative Instance is that with regard to whch there is an agreement between the two parties of a disputation It is of two kinds—(1) The Instance *per* similarity, *e.g.* the kitchen is the instance corroborating the reason ' smoke ' as proving the presence of fire (the kitchen being similar to the thing in question, in that it contains smoke and fire); and (2) the instance, *per* dissimilarity ; *e.g.* in corroboration of the same reason we have the dissimilar instance of the Lake (which is *dissimilar,* inasmuch as it presents a case where there being no fire there is no smoke).

Section (6).

ON DEMONSTRATED TRUTH.

Demonstrated Truth is a conclusion that is recognised as proved. It is of four kinds :—(1) That which is accepted as such by all systems of philosophy ; (2) that which is admitted by any one system only ; (3) consequential, that is a natural corrollary to another established conclusion ; and (4) that which is accepted as such only as the basis of another thesis. To the first class belong such propositions as that everything that has qualities exists ; to the second class, the proposition accepted in the Nyāya system and in the allied system of the Vaiśeṣika, that the mind is a sense-organ ; to the third class belongs the proposition that 'God is omniscient' following as a necessary corrollary to the conclusion that 'earth, &c., are created by God ;' to the fourth class belongs the proposition that 'sound is a quality' which is admitted by Jaimini for the purpose of discussing the question of its eternality or non-eternality.

Section (7).

FACTORS (OF SYLLOGISTIC REASONING).

The several factors of the inferential syllogism are called its 'avayava.' They are five in number, consisting of Final Conclusion and the rest. Says the *Sūtra* (1-1-32)—'The *members* are—Statement of the Proposition, Statement of the Probans, Statement of Example, Application of the Reason to the subject in question, and Final Conclusion.' The sentence that speaks of the 'subject' as qualified by the predicate—probandum—is called the 'statement of the proposition,' *e. g.* the sentence 'this mountain contains fire.' The sentence that puts forward the reason—*probans*—ending in words either with the Instrumental or the Ablative termination, is called the 'Statement of the Reason,'—*e.g.* '*dhūmavattvena*' or '*dhūmavattvāt*' 'because it contains smoke.' The sentence which points out the invariable concomitance (between the *probans* and the *probandum*), along with the corroborative instance, is called the, 'statement of example,' '—*e.g.*, 'that which contains smoke contains fire, as for intance, the kitchen.' That which points out the presence of the *probans* in the 'subject,' is called the. 'application of the Reason to the subject,'—*e.g.* 'this mountain contains smoke which is invariably concomitant with fire' or 'this mountain contains smoke.' That which sums up the presence of the *probandum* in the 'subject' is the 'Final Conclusion,'—*e.g.* 'therefore this mountain contains fire.' These are the several 'factors' of the syllogistic statement, and as such they resemble 'parts' of the whole; and are not so many 'parts' in the sense of the 'constituent cause'; because the constituent cause of all sounds (and words are only *sounds*) is the *Akāśa*.

Section (8).

ON HYPOTHETICAL REASONING

Hypothetical Reasoning consists in pointing out an undesirable con-tingency; that is to say, when of two things that are invariably concomitant, we admit that which is concomitant and thereby indicate that with which it is concomitant, this process is what is called 'Hypothetical Reasoning;'for instance, (having recognised the fact that all jars are perceptible,) thereby accepting the concomitance between 'jar' and 'perceptibility') when we say 'if the jar had been here' (by which we admit the concomitant jar) 'it would have been perceptible' (thereby indicating the possibility of *perceptibility*, which is not desirable, the jar being not perceived at the place). This 'Reasoning serves as an aid to the instruments of right cognition. For instance, when there arises a doubt as to whether or not the mountain contains fire, if some one were to assert that it did not contain fire, then against him we would urge—'if it did not contain fire, then, being without fire, it would be without smoke also'—whereby the undesirable contingency of 'smokelessness' (when the mountain is actually found to be smoking) is pointed out; and it is this urging of an undesirable contingency that constitutes 'Hypothetical Reasoning': this particular Reasoning serves to clarify (or ratitify) the conclusion arrived at by means of Inference; for instance, it raritifies or validates the notion of the presence of *fire* which forms the object of inference based upon *smoke* as the *probans*: inasmuch as it invalidates or rejects all possibility of the *absence of fire.* It is in this manner that Hypothetical Reasoning aids Inferences. Some people seek to include this Reasoning under 'Doubt,' but this is not right: because it pertains to one aspect of the case only (while Doubt pertains to both aspects).

Section (9)

ON DEFINITIVE COGNITION.

Definitive Cognition is assured conviction ; it is the ultimate result of the Instruments of Cognition.

Section (10).

ON DISCUSSION.

Discussion consists in disquisition between two persons desirous of arriving at the true conclusion in regard to the subject at issue ; it is in this that we find the use of the eight *nigrahas* or *clinchers,—Deficiency, Superfluity, Abandoning of position* and the five 'fallacious reasons' (to bo described below) .

Section (11).

ON DISPUTATION.

Dispatation consists in the discussion that is held between two persons desiring victory over each other, and which contains arguments in favour of both sides of the question at issue. In this form of discussion all the various *Clinchers* find their place, in accordance with the exigencies of argumentation. Its ultimate purpose lies in the establishing of one's own position, after the demolishing of the position of the adversary.

Selion (12).

ON WRANGLING.

The above, when not leading to the establishing of one's own position, is what is called 'Wrangling ;' its sole aim lies in the demolishing of the opponent's position. In fact, for the wrangler, there is no position to be established. The form of discussion called '*kathā*' or 'Disputation' consists in the statement by more than two persons, of the arguments in support of the two sides of the question at issue.

Section (13).

OF FALLACIOUS PROBANS OR REASON.

With regard to the *Probans*, several necessary conditions have been laid down, such, for instance, as that it should subsist in the 'subject,' and so forth: in so far as it fails in any one of these points, it is regarded as 'fallacious.' Even so, however, it may be found to possess some of the charactristics of the real 'probans'; and as such *appearing* as 'probans' it has been called 'semblance of the probans.' There are five kinds of Fallacious Reason—(1) 'the unproved or unattested,' (2) 'the contradictory,' (3) 'the inconclusive' (4) 'the neutrlised,' and (5) 'the annulled.' Udayana has pointed out that the *probans* is said to be 'known' or 'proved' when it is actually recognised as *concomitant with the probandum and as subsisting in the 'subject'*; and it is the absence of this recognition that, according to him, constitutes the fallacy of the 'unknown or unproved probans.' Though this definition is found to be applicable to the 'contradictory probans' and other fallacies also, yet we shall proceed to show in what manner this may be regarded as applying distinctively to the 'unknown probans' only. In the case of all fallacious Reasons that condition is held to be the 'fallacy' vitiating the Reason which is the first to be detected and which is actually capable of indicating the Reason to be fallacious; and inasmuch as it is the fallaciousness of the Reason being clearly indicated by this one fact, that closes the discussion, there is no force in any other vitiating conditions that may happen to be subsequently detected; in view of this, that Reason alone can be called 'contradictory' in regard to which the vitiating condition that is detected first of all is that it involves *contradiction*, inasmuch as it is actually concomitant with the contrary of the *probandum* that is sought to be proved by its means; similarly, in cases where the vitiating condition detected is that it is not actually concomitant with the *probandum*, the fallacy attaching to the Reason is called 'inconclusiveness,' and so on. In the same manner in cases where there is no knowledge of the fact that the Reason is invariably concomitant with the *probandum*, or that it subsists in the 'subject' the reason is said to be 'Unknown or 'Unproved.'

This fallacy of the 'Unknown' or 'Unproved' is of three kinds:—(a) *that which has an unknown or uncertain subject,* (b) *that whose very form is not proved, and* (c) *that which has its invariable concomitance not established.* As an example of the *first* of these we have the following reasoning—'The sky-lotus is fragrant, because it is a lotus, like the ordinary lotus in the water'; in this we find that the 'subject' of the Reason (*character of the lotus*) is the 'sky-lotus' which is a non-entity. Another example we have in the reasoning —'The jar is non-eternal, because it is a product, like the cloth.'

In regard to the latter example an objection is raised: "In this case the 'Subject' of the Reason is the jar, and as this is not a non-entity, the Reason cannot be said to have its 'Subject' unknown; though it may be regarded as a superfluity, proving the *non-eternality of the jar* which is already proved." This is not right, we reply; any object does not, by its very nature, become the 'Subject' of an Inference; it is regarded as a 'Subject' only when the presence of the *probans* in it begins to be suspected; this is what is thus declared in the *Bhāṣya*—'Reasoning is operative neither with reference to what is not known at all, nor with reference to that which is definitely known; but only with reference to that whose presence is suspected'.—In regard to the reasoning in question, we find that there is no *doubt*— or mere suspicion— with regard to the *non-eternality* of the jar; as it is definitely known for certain; consequently even though by itself the jar is an entity, yet, inasmuch as there is no *doubt* as to its *non-eternality,* it cannot be regarded as the 'Subject'; and hence the 'Subject' being not 'known' as such, the Reason becomes fallacious.

(b) The reason is said to be one that has its form not known which does not subsist in the 'Subject'; as an example, in the reasoning 'Generality is non-eternal, because it is an effect,'—where as a matter of fact, the Reason, 'Character of effect' is such that it does not subsist in the *generality* which is the 'Subject.' 'The partially unknown' also is only a form of that which has its form not konwn.* An example of this 'partially unknown' we have in the reasoning—'The four atoms of Earth, Water, &c. are eternal,—because they are odorous'—where *odorousness* is such that it is not present in all the four that go to make up the 'Subject,' subsisting as it does in the Earth-atom only ; this is what makes the Reason 'partially unproved.' In the same manner, 'the unknown qualification,' 'the unknown qualified,' 'that form of the unknown in which the qualification is impotent or incapable', 'that in which the qualified is impotent' and so forth are only forms of 'that which has its form unknown.' An example of the 'unknown qualification' we have in the reasoning—'sound is eternal, because being a substance 'it is not tangible'; here the Reason is 'intangibility coupled with substantiality', and not merely, 'intangibility'; and as sound is a quality, the qualification of 'substantiality' is not present in it ; and this is what constitutes the 'unknown qualification,' as so long as 'substantiality' is not present the 'intangibility coupled with substantiality' cannot be present in it ; as for example if either the man or the stick be absent, the 'man with the stick' cannot be present ; consequently even though *intangibility* is present, inasmuch as the *qualified* intangiblity is not present, the reason becomes one that has its form not known. An example of the 'unknown qualified' we have in the reasoning—'sound is eternal, because

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* There is in one of the MSS. before the last section a long pssage describing the 'partially unknown' Reason; this passage is not found in the other

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3 MSS ; nor is it in keeping with the sentence that follows—*bhāgāsiddho'pi svarvpāsiddha eva*. Hence it has been omitted in the text ; but we translate it here in the *note*.

"An example of the *partially unknown* we have in the reasoning :—Sound is non-eternal, because it is always accompanied by Effort ; here the non-eternality of sound is the *probandum*, its being accompanied by effort is the *Reason* ; and as a matter of fact this last character is not found to be present in *all Sounds* ; because though the first utterance of the Sound is certainly preceded by the effort of the speaker, yet the sound-waves following upon that first sound are brought about by the sound-waves preceding them ; and hence are not *preceded by Effort* ; this is what makes the Reason 'partially unknown.' *Question*:—What do you mean by 'being accompanied or preceded' by effort ? *Answer* :—What happens is that first of all there is contact of the mind with the Soul ; then Cognition, then the desire to speak, then the effort, then the disjunction of the wind in the body from its former position, and its contact with another position,—whereupon follows the first sound-wave. And thus it is this first sound-wave alone that is preceded immediately by Effort ; which cannot be said of the further sound-waves that are produced by that wave; because the precedence of Effort is present in only a few sounds, the first sound-waves ; but is not present in *all*.

being intangible it is a substance'; here also the reason is a qualified one (the *intangibility* qualifying *substantiality*); and when the *qualified* (*substantiality*) is absent, the qualified Reason cannot be present. An example of the 'impotent qualification' we have in the reasoning—'sound is eternal, because being a quality, it has no cause'; here the qualification 'being a quality' is 'impotent,' because it has absolutely no force (in the proving of eternality); *Eternality* being proved merely by the *absence of cause*; it is thus that the reason comes to be one of 'impotent qualification'; this becomes only a form of that which has its form unknown, because when the qualification is absent, the Reason qualified by it is also absent. An objection is raised—"The *being a quality* constitutes the qualification, and this is certainly present in sound." True, the character of 'quality' is present in Sound; but it is not a 'qualification' of the Reason; because that alone can be regarded as the 'qualification of the Reason' which serves the useful purpose of distinguishing it from other things; and as this purpose is not served by the mention of 'being a quality,' it is for this reason that it is called an 'impotent qualification. An example of the 'impotent qualified' we have in the same reasoning stated conversely--*e.g.* 'sound is eternal because being without cause, it is a quality'; here the mere qualification—'being without cause' is sufficient to prove the required *eternality*; and the 'qualified' (*being quality*) is 'impotent' (without force to prove the conclusion). This also is a form of 'that which has its form unknown,' because in the absence of the object qualified, the 'qualified' is not present; and it is in the qualified form that the Reason it put forward; the rest is as before.

(c) *The Reason 'that has its invariable concomitance not duly ascertained'* is of two kinds—(1) That which is not concomitant with the *probandum*, and (2) that which is related to a *probandum* with an adventitions adjunct. An example of the former we have in the reasoning—'All that exists is momentary like the clouds,--Sound and the other objects in question exist,—therefore these objects are 'momentary'; here 'sound and other objects' form the 'subject,' the 'momentary charcter' of these is the *probandum*, and their 'existence' is the *probans* and as a matter of fact we find that there is no proof for asserting the invariable concomitance of 'existence' with 'momentariness.' The second kind—*i.e.*, that reason *whose invariable concomitance is not ascertained*, because of its being related to a *probandum* with an adventitious adjunct,—we have in the following reasoning:—'He is dark,. because he is Maitrī's son like a number of Maitrī's children whom we see'; here *darkness* is sought to be proved by the circumstance of being Maitrī's son; but as a matter of fact we know that what makes the dark complexion is not the fact of being Maitrī's child: what brings it about is the effect of her feeding upon vegetables, &c. and it is this latter that is called 'Upādhi' (adventitionus vitiating adjunct): hence in the relationship of *darkness* with *the character of being Maitrī's child*, we find an adventitious adjunct in the shape of *being the effect of feeding on vegetables;* similarly, if we seek to prove the presence of smoke by the presence of fire, we meet with an adventitious adjunct in the shape of the *contact of wet fuel;* thus then, by reason of these adjuncts, we find that there is no real concomitance between the *reason* and that which is sought to be proved by it and it is for this reason that such Reasons are held to be such as *have their invariable concomitance not ascertaiaed.* Another example of this same fallacy we have in the reasoning—'The killing of animals at sacrifices is sinful;—because it is *killing*,—like the killing apart from sacrifices';--in connection with this we know that what makes the killiug *sinful*, is not its being *killing*, but the fact of its *being prohibited in the Scriptures;* which latter, therefore, forms the adventitious adjunct in the case: and thus in this case also the desired invariable concomitance cannot be ascertained. An objection is raised:--"The *adventitious vitiating adjunct* has been defined as 'that which while being the invariable concomitant of the *probandum* is not the invariable concomitant of the *probans*'; and this is not found to be applicable to *the character of being prohibited by the Scriptures* (which has been put forward as the adventitious condition in the above reasaning); how then can this character be regarded as a *vitiating condition*?" This is not right, we reply; because as a matter of fact, the said definition of the *vitiating condition* is quite applicable to the *character of being prohibited:* for instance, this character is certainly the concomitant of the *probandum*, 'sinfulness'; because we know that whatever is *sinful* is always *prohibited*; on the other hand, it is not true that whatever is *killing* is always *prohibited*, because in the case of *sacrificial killing* we find that it is *not* prohibited. Thus have we explained the three kinds of the ' Unproven Reason.'

(2) We proceed to explain the 'Contradictory Reason'—That Reason which is concomitant with the contrary of the *probandum* is called ' Contradictory.' An example of this we have in the reasoning—'Sound is eternal, because it is a product '; here *eternality* is the *probandum* and 'being a product' the Reason ; but as a matter of fact we know that what the 'product ' has for its invariable concomitant is, not *eternality* but its contrary 'non-eternality' ; as all that is a *product* is always found to be *non-eternal* : consequently the Reason in this case, 'being a product,' becomes 'Contradictory.'

(3) That Reasson which is of a character that makes the *probandum* doubtful is called 'Inconclusive' or 'Fallible.' It is of two kinds—*that which is inconclusive because too comprehensive or wide, and that which is inconclusive because too exclusive or narrow.* To the former class belongs that Reason which subsists in the ' Subject ' as well as in such things in which the *probandum* is known to exist and also in such things in which the *probandum* is known to be absent ; e.g. in the reasoning ' Sound is enternal because it is knowable, ' we find that the Reason ' knowability ' is present in the ' Subject, ' *Sound* ; as well as in such things as *Ākāśa* and the rest which are *eternal*, and in which as such, the *probandum* 'Eternality ' is known to be present ;—and also in such things as the jar and the rest, which are non—eternal, and in which, as such, the *probandum* ' Eternality,' is known to be absent ; thus the Reason, ' Knowability ' is found to be ' inconclusive, because too comprehensive. ' The Reason that is ' inconclusive because too exclusive ' is one that is present in the ' subject ' only, and not in either such things as are known to contain the *probandum*, or in things in which the *probandum* is known to be absent ; an example of this we find in the reasoning—' The earth is eternal, because it is odorous ' ; here ' odorousness ' is the Reason ; and we know that it subsists only in the earth ; and not either in such eternal things as *Ākāśa* and the rest in which the *probandum* ' eternality ' is known to

be present nor in such non-eternal things as *Water* and the rest, in which the *probandum* is konwn to be absent. We proceed to describe that form of Inconclusive Reason which is known by the particular name of 'Fallible.' As a rule, all valid Reasons are such that while subsisting in all things known to contain the *probandum,* they do not subsist in any such thing as is known to contain the contrary or negation of the *probandum* ; under the circumstances, the 'fallibility' or 'failure' of the Reason consists in its not fulfilling this aforesaid condition, by having the *contrary of the probandum* for its concomitant ; and this 'fallibility' is two-fold,—consisting (1) in subsistence in both, that in which the *probandum* is present and that in which the contrary of the *probandum* is present, and (2) in not subsisting in either of these two.

(4) The 'Neutralised Reason' is that which is opposed by an equally strong reason to the contrary ; another name of this kind of 'fallacious reason' is '*Satpratipakṣa*' ; an example of this we have in the reasoning—'Sound is non-eternal, because we do not find in it any eternal properties' ; as opposed to this we have the counter-reasoning, 'Sonnd is eternal because we do not find in it any non-eternal properties' ; this latter reasoning is called '*pratipakṣa*' or 'opponent', because being equally strong it establishes a conclusion directly contrary to that of the former reasoning ; that which is not equally strong is not a real 'opponent.' The reasoning proving the contrary of a conclusion is of three kinds—(*a*) that upon which the former reasoning is dependent, (*b*) that which is dependent upon the former reasoning and (*c*) that which is neither of these two ; the first of these being the more powerful of the two tends to the rejection of the former reasoning ; *e.g.* when the reasoning—'the atom is non-etenal, because it is material or corporeal, like the jar'—is opposed by the reasoning proving the existence of the atom, this latter reasoning, even though proving the *eternality* of the atom, which is the contrary of the former conclusion, cannot be regarded as the 'opponent' or 'counter-reasoning' of the former, because it is such that the former depends upon it, and as such the latter reasoning tends to the formor

being entirely rejected; the dependence of the former reasoning upon the latter is based upon the fact that it is the latter that establishes the 'Subject' of the former; so long as the 'Subject' *Atom* has not been duly cognised by means of a valid of knowledge, the reasoning as to its non-eternality cannot proceed; as if it did proceed, it would be open to the fallacy of the 'unproven or unknown subject'; consequently, the very putting forward of the reasoning in support of the non-eternality of the atom presupposes the validity of the reasoning proving the existence of the atom; as in the absence of this latter, it could not itself appear; and thus being dependent upon it, it becomes rejected by it, being the weaker of the two. When, on the other hand, the second reasoning, is one that is itself dependent upon the former reasoning it happens to be the weaker of the two; and is, therefore, rejected by it; as in the case of the two reasonings just mentioned, if the order of the two were reversed. For these reasons it is only when the two reasonings are equal in their strength (apparent validity) that we have the fallacy of 'neutralisation.'

(5) That Reason is said to be 'annulled,' in whose 'Subject' the absence of the *probandum* is known by a more authoritative instrument of cognition; another name for this 'fallacious reason' is '*Bādhitaviṣaya*,'—*i. e.* 'whose object is sublated.' An example of this we have in the reasoning 'Fire is not hot, because it is a product, like water'; here the Reason is 'being a product,' and it is put forward to prove the 'absence of heat'; and as a matter of fact, the absence or negation of this 'absence of heat' in the 'Subject' *fire* is known by means of Sense-perception; inasmuch as the *hotness* of fire is known by the Tactile organ. Another instance of the 'Annulled Reason' we have when 'being an entity' is brought forward as a reason to prove the momentary character of the jar; because here also the *negation of the probandum 'momentariness'*—*i. e.*, the non-momentary character of the jar is known by means of *Sense–perception* in the form of Recognition; inasmuch as when we see a jar that we have seen before, we at once have the recognition in the form 'this is the same jar that I had seen before,'—this recognition being brought about by

the sense-organ as aided by the impression left by the previous perception, and apprehending within itself the two points of time (past and present); and this Recognition proves that the jar is lasting, not momentary.

All the aforesaid five 'fallacious reasons' are not 'Reasons' proper; because they fail to establish their *probandum,*—being wanting in one or more of the necessary conditions of the 'valid reason,'—such for instance as that *it should subsist in the 'subject'* and so forth.

All definitions are 'reasons' of the universal-negative kind (serving to preclude from a certain category things not fulfilling the specified conditions); consequently the three 'defects' pertaining to definitions,—*viz.* 'too narrow,' 'too wide' and 'impossible'—are to be included among the above five 'fallacious reasons,' and are nothing apart from these. For instance, the 'too wide' definition falls within the scope of the 'Reason whose concomitance with the *probandum* is not proven,' inasmuch as the definition does not exclude each and every such thing as is known to contain the negation of the *probandum*; and also because it is vitiated by an adventitious adjunct; as for instance, when the cow is defined as 'an animal'; where it is a well-known fact that what makes the cow a 'cow' is 'the presence of the dewlap and such other distinctive features.' Similarly the 'too narrow' definition falls within the 'partially unproven Reason,' as for instance when the cow is defined as 'the variegated cow.' In the same manner the 'impossible' definition falls within the 'absolutely unproven Reason'; as when the cow is defined as 'the animal with undivided hoofs.'

Section (14).

ON PERVERSION OR CASUISTRY.

When a person puts forward an assertion by means of words conveying one sense, if the other person should take the words in another sense and then proceed to point out defects in the reasoning,—this procedure is what is called '*Perversion.*' For example, one person says '*Navakambaloyam Devadattaḥ*', meaning thereby that Devadatta possesses a *new blanket*; but the other person takes the word '*nava*' in another sense (that of *nine*) and then proceeds to point out the mistake in it by showing that Devadatta being a poor man does not possess *nine blankets*; he cannot afford even *two*, whence could he have *nine*?' The disputant who has recourse to this method is called 'perverse' or a 'Casuist.'

Section. (15).

ON FUTILE REJOINDER.

The *Futile Rejoinder* consists in the incorrect answer; it is of many kinds—*Utkarṣasamā*,' '*Apakarṣasamā*,' and so forth; we do not describe all these many varieties here. When the possibility of the presence of a property that is not concomitant with Reason is put forward on the basis of the presence in the *probandum* of a certain property which, though present in the object cited as the corroborative instance, is not one that is invariably concomitant with the Reason,—we have a case of the *Utkarṣasamā*; as for instance, when the reasoning 'sound is non-eternal, because it is a product, like the jar' has been put forward, if, in answer to it, some one were to say,—'if by reason of its being a *product*, should be regarded as *non-eternal*, like the jar, then, like the same jar, and for the same reason, it may be regarded as a *composite* substance also'; [where though in fact, *non-eternality* is invariably concomitant with *being a product*, yet *compositeness* is not so concomitant with it; and merely on the ground of the compositness being found, in the jar, along with the quality of *being a product*, the possibility of its presence in *Sound*, which is the 'subject,' is put forward for the purpose of discrediting the aforesaid reasoning]. The *Apakarṣasamā* is that where through that quality belonging to the corroborative instance, which is not invariably concomitant with the Reason, one puts forward the possibility of the *negation of a certain quality*, such negation not being one with which the Reason is invariably concomitant; for instance, if, in answer to the aforesaid reasoning (proving the non-eternality of sound), some one were to say—'if by reason of its being a product, should be regarded as non-eternal like the jar, then, like the same jar, and for the same reason, it may also be regarded as *not audible*; as certainly the jar is *not audible*.'

Section (16).

ON CLINCHERS.

A Clincher is that whereby the opponent is silenced or defeated. It is of many kinds—such as 'deficiency,' 'superfluity,' 'renouncing of position,' 'incoherence,' 'fatuity,' 'admission of the opponent's view,' 'contradiction,' and so forth,—yet, for fear of becoming too prolix, we do not describe all of them. That which falls short of what is intended to be said, is called 'deficient'; that which goes beyond what is intended is 'superfluous'; when one falls off from the position he had taken up, he is said to 'renounce his position'; when what is said does not bear upon the subject under consideration, we have 'incoherence'; when the man is absolutely incapable of finding an answer, we have a case of 'fatuity'; when the man is made to admit the view of his opponent, we have the 'admission of opposite view'; when the man demolishes what he originally wished to establish, we have a case of 'contradiction.'

In this work we have again and again explained those things that are extremely useful; if we have omitted to explain things not of much use, this fact cannot be urged against us; as what we have explained is enough for the purpose of of the young learner.

Thus ends the 'Exposition of Reasoning' by Kes'ava Mis'ra.